Intermodal Technical Assistance for Transportation Planners and Policymakers

U.S. Department of Transportation

Office of the Secretary of Transportation

December 1994
Prepared by the Office of Intermodalism

It is the policy of the United States Government to encourage and promote development of a national intermodal transportation system in the United States to move people and goods in an energy-efficient manner, provide the foundation for improved productivity growth, strengthen the Nation's ability to compete in the global economy, and obtain the optimum yield from the Nation's transportation resources.

Intermodal Surface Transportation Efficiency Act of 1991

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FOREWORD

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) identified a shift in transportation priorities: the need to obtain the optimum yield from existing resources, rather than relying solely on system expansion. Given the objectives of fiscal responsibility and environmental stewardship, the challenge for planners and policymakers is to meet our nation's demand for mobility by making the best use of each transportation mode.

Intermodalism is an approach that seeks efficient connections between modes, appropriate choices among alternative modes, and active cooperation among transportation providers. It recognizes that improvements to a particular transportation mode will likely have consequences for other modes. It requires planning that considers the full range of alternatives, assuring that safety and. environmental benefits are integral to the solution.

Our transportation challenge is to apply an intermodal framework to a mature infrastructure, where the often competing demands for greater mobility and environmental protection must be met by planning, management, and maintenance rather than simply, as in the past, physical expansion. Congress, via ISTEA and the Clean Air Act Amendments of 1990 (CAAA), has pointed the way to meet this challenge.

ISTEA established a clear linkage between transportation planning and project funding. It shifted much decisionmaking control to state and local jurisdictions, while requiring that those decisions be consistent with broader planning frameworks that reflect the connection between transportation and the environment. It greatly increased the range of projects eligible for federal funding, which has led to unprecedented dialogue-on a local, state and national level-among the many interests in the transportation community: public and private, passenger and freight, provider and user.

The Department of Transportation seeks to build on the momentum of ISTEA to improve the intermodal planning environment for those who make important transportation decisions. This resource document, updated and expanded since its first publication in 1993, provides information on intermodal technical assistance activities supported by the Department. It describes available tools-studies, conferences, courses, reports, data, and quantitative models—that can help planners and policymakers respond to the requirements of ISTEA and CAAA.

We hope this publication meets your needs, and we welcome your suggestions for future initiatives.

Michael I? Huerta
Associate Deputy Secretary
Director, Office of Intermodalism
U.S. Department of Transportation

ACKNOWLEDGMENTS

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USERS GUIDE

This report is intended to help you find-quickly and easily— information on intermodal technical assistance provided by the U.S. Department of Transportation. It does not contain information on DOT activities focused on a single mode, the many intermodal projects in the planning stages, or activities sponsored by DOT's regional offices. The information is current as of October 1994.

There are three major sections to this report:

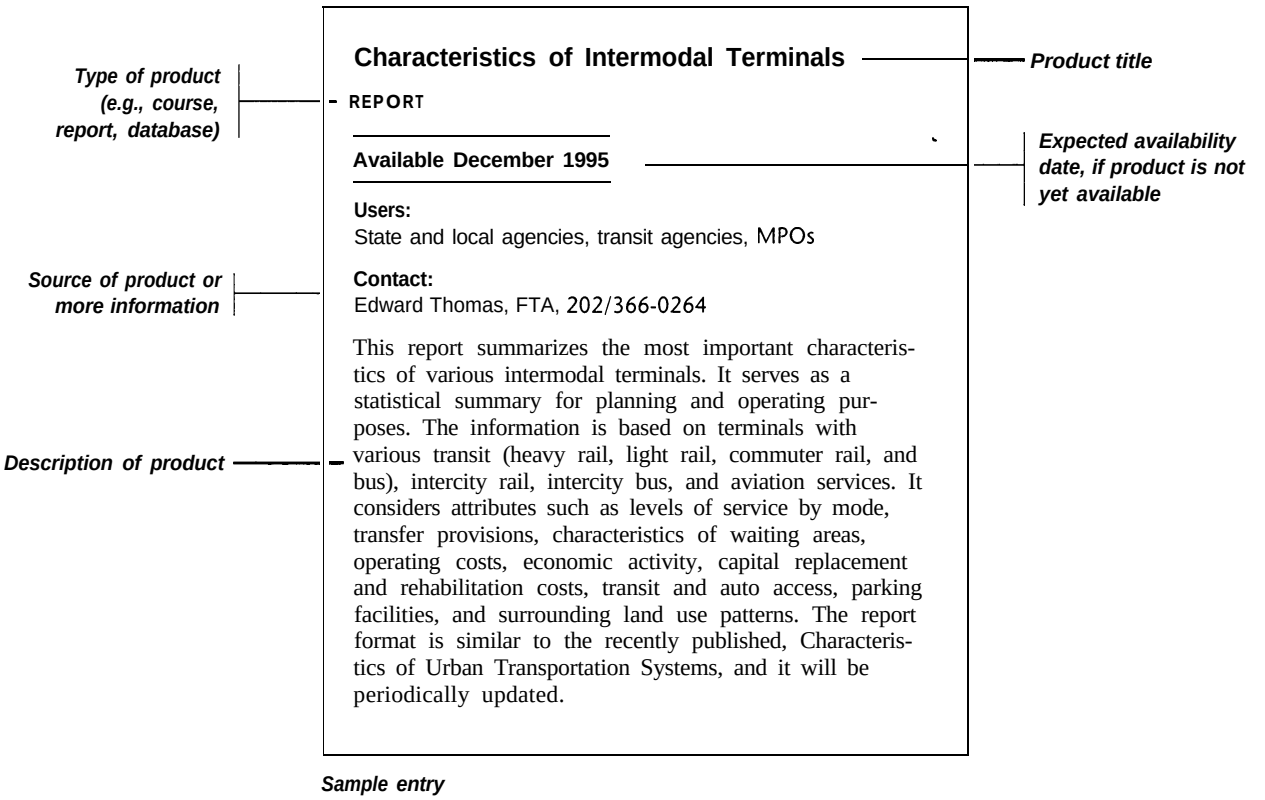
- Categorized Listings (beginning on page 3)— technical assistance products sorted by principal subject category (see figure). Although many activities address more than one subject area, they have been listed only once, in the category deemed most appropriate.
- Resource Centers (beginning on page 49)-a list of DOT-sponsored sources of information and assistance on intermodal transportation.
- Indices (beginning on page 55)—by title, by lead agency, and by product.

If *you* have *questions about any of the products* listed in this report, please call the person listed as the contact for that product.

If you have *questions about this report or DOT's intermodal program,* please contact Mark Sullivan, Office of Intermodalism, U.S. Department of Transportation, S-3, 400 Seventh St., S.W., Washington, DC 20590-0002 (telephone 202/366-8017).

If *you* have *suggestions for future editions* of this report, please complete and mail the reader survey form included at the front of this report.

To order a copy of this report, send a self-addressed mailing label to the Technology Sharing Program (M-45.3), U.S. Department of Transportation, 400 Seventh St., S.W., Washington, DC 20590; please be sure to include the report title in your request.



Sample entry

ABBREVIATIONS LIST

AAI'A	American Association of Port Authorities
AASHTO	American Association of State Highway and Transportation Officials
BTS	Bureau of Transportation Statistics
CAAA	Clean Air Act Amendments of 1990
CTPI'	Census Transportation Planning Package
DOT	Department of Transportation
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographical Information System
GRMS	Gage Restraint Measurement System
HOV	High-Occupancy Vehicle
ICC	Interstate Commerce Commission
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
IVHS	Intelligent Vehicle-Highway Systems
MAGLEV	Magnetic Levitation
MARAD	Maritime Administration
MPO	Metropolitan Planning Organization
NARC	National Association of Regional Councils
NHI	National Highway Institute
NHTSA	National Highway Traffic Safety Administration
NM'S	National Personal Transportation Study
NTI	National Transit Institute
RSPA	Research and Special Programs Administration
STPP	Surface Transportation Policy Project
TCM	Transportation Control Measure
TDM	Travel Demand Management
TRB	Transportation Research Board
USCG	United States Coast Guard
UTC	University Transportation Centers
UTPS	Urban Transportation Planning System

CATEGORIZED LISTINGS

Congestion Management 4

Economic Analysis 5

Environmental and Social Impact Analysis 6

Highway-Rail Grade Crossings 13

Intermodal Connections 15

Public Outreach/Participation 23

Transportation and Land Use 24

Transportation Planning 27

Transportation Statistics and Data 39

Transportation Control Measures/
Travel Demand Management 46

CONGESTION MANAGEMENT

Congestion Management for Technical Staff

COURSE (Group Registration; see page 52)

Users:
State, MPO, and other local government staff interested in the implementation of congestion management systems

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Doug Laird, FHWA, 202/366-5972

Course Number:
15259

This 3-day NHI course is designed to provide participants with a basic understanding of the methodologies for the measurement of congestion, strategies for relieving congestion, and the design and operation of a congestion management system. It is designed for planners and engineers at state and local levels, as well as representatives from MPOs, transit agencies, and other organizations participating in the development and implementation of congestion management systems.

Congestion Management Systems Prototype

MODELS

Available Spring 1995

Users:
State, **MPO, and local planners**

Contact:
Doug Laird, FHWA, 202/366-5972

This project is designed to provide technical assistance and guidance to states, MPOs, and local governments who are required, under the Intermodal Surface Transportation Efficiency Act, to prepare a congestion management system. Prototype congestion management systems will be developed to model different scenarios to illustrate a policy, program, and institutional plan for developing, establishing, and implementing such systems.

Modeling the Effectiveness of Congestion Management on an Areawide Basis

REPORT

Available January 1995

Users:
State **and local planners, persons responsible for reviewing congestion management systems**

Contact:
Brian Gardner, FHWA, 202/366-4061

The report focuses on multimodal transportation system performance measures, supporting analysis, and data collection procedures for congestion management systems. These measures are aimed at evaluating and monitoring congestion on a transportation system. Particular emphasis is placed on the practicality and user-orientation of the performance measures. The report should be of use to state and local planning staff; other individuals involved with planning, designing, implementing, and reviewing congestion management systems; and individuals involved in transportation systems planning.

ECONOMIC ANALYSIS

Application of Least-Cost Principles to Transportation Planning

REPORT

Users:
State, MPO, and local planners

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

This report reviews the literature, evaluates approaches to least-cost transportation planning, and develops a primer on application of the technique.

Port Capital Expenditures

REPORT

Users:
Port authorities and planners

Contact:
William Dean, MARAD, 202/366-4357

This report analyzes the results of the American Association of Port Authorities capital expenditure survey for 1993. The study upon which the report is based classifies capital expenditures by facility type and new construction versus modernization/rehabilitation for the study year and for a 5-year projection. The methods of financing capital expenditures are thoroughly examined.

Public Port Finance in the United States

REPORT

Users:
Decisionmaking bodies and government regulatory agencies; legislators, voter constituencies, and the general public; port users **and the port industry**

Contact:
Capt. James Carman, MARAD, 202/366-4357

This report is based on a study conducted by MARAD and the American Association of Port Authorities on public port financing as it relates to port development and expansion. The study assessed the new and emerging financial, technological, and environmental circumstances under which ports operate. The report consists of an in-depth look at the financial reports of public port authorities in the United States for the period 19884992. The report also addresses legislative issues under which ports operate; nationwide economic impacts of the ports; public port capital expenditures; the international trade climate, present and projected; technological developments impacting ports; and privatization trends outside the United States.

Report to Congress on the Status of the Public Ports of the United States, 1992-1993

REPORT

Available December 1994

Users:
Congress, port authorities, state and local planners

Contact:
William Dean, MARAD, 202/366-4357

This report covers the U.S. public port industry's economic activities and issues for calendar years 1992 and 1993. The first section of the report provides an overview of the U.S. public port industry's economic importance and current capabilities. The second section of the report discusses the key issues facing the U.S. port industry. The third section describes several related developments of interest or concern to the port industry.

What Ports Mean to the Economy

REPORT

Users:
Port planners; state, **MPO** and **local planners**

Contact:
Capt. James Carman, MARAD, 202/366-4357

This report is based on an input-output analysis that assesses interindustry purchases of goods and services. The report shows, in quantifiable terms, how the port industry is economically linked with every other sector of the economy. The economic impacts are presented in terms of jobs generated, sales revenues, payroll, contribution to gross domestic product, and revenues.

ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS

Air Quality Analysis for Transit Projects

REPORT

Available May 1995

Users:
Environmental analysts from state and local transportation and air agencies; federal agency reviewers; consultants specializing in air quality analysis

Contact:
Abbe Marner, FTA, 202/366-0096 (fax 202/366-7951)

Because of rigorous new air quality "conformity" requirements and increased attention to emissions from diesel engines in the 1990 Clean Air Act Amendments, FTA is preparing technical guidance on analyzing the air quality impacts of several common types of transit facilities. A set of six case studies will take the reader step-by-step through the analytical process, highlighting the necessary travel inputs, the recommended emissions and dispersion models, and the reporting and coordination of the results with air quality agencies.

Air Quality Programs and Provisions of the Intermodal Surface Transportation Efficiency Act of 1991

BROCHURE

Users:
State, regional, and local planners; state/local elected officials; USDOT; EPA

Contact:
Alexander Elles-Boyle, FHWA, 202/366-2079 (fax 202/366-3409)

This brochure provides a summary of the ISTEA provisions that can assist state and local officials as they pursue the goals and requirements of the Clean Air Act Amendments.

Conference on Transportation, Environmental Justice, and Social Equity

PROCEEDINGS

Available December 1994

Users:
MPOs, transportation officials, environmental and social justice communities, national low-income and social equity groups, transit operators, federal agencies, state and local governments

Contact:
William Menczer, FTA, 202/366-4060 (fax 202/366-7116), or Laura Olsen, STPP, 202/939-3470 (fax 202/939-3475)

This conference, held November 1994, brought together federal transportation officials and representatives from social justice, civil rights, environmental, and grassroots community groups to explore issues that included: the impacts of siting transportation facilities and services in low-income and minority neighborhoods; social equity in transportation investments; relationships between transportation and the environment, land use, and the economy; social justice in transportation decisionmaking; and the relationships between transportation and the provision of government services. Participant input and conference findings will be used by FTA to-address the President's Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

Evaluation of MOBILE Vehicle Emission Model

REPORT

Users:
State, local, and MPO planners; FHWA; FTA; EPA

Contact:
Dick Schoeneberg, FHWA, 202/366-2076

The Clean Air Act Amendments imposed stringent requirements for transportation plans, programs, and projects to conform with state implementation plans for the attainment of National Ambient Air Quality Standards. EPA's MOBILE model is the primary analytical tool for predicting vehicle emis-

sions generated by proposed projects and determining whether conformity exists. This report evaluates the MOBILE model, with emphasis on its utility in evaluating transportation activities.

Environmental Externalities and Social Costs of Transportation Systems—Measurement, Mitigation and Costing

BIBLIOGRAPHY

Users:
Federal, state and local transportation planning officials and policymakers, railroad officials, and the environmental community

Contact:
Marilyn Klein, FRA, 202/366-0358

This bibliography summarizes several recent reports and articles that address measuring, mitigating, and costing transportation's environmental and social impacts. The first chapter provides an overview of social and environmental transportation impacts. Subsequent chapters address individual areas of impact-air and water pollution, noise, energy, safety, community disruption, congestion, and hazardous materials. The last chapter summarizes the scope of research currently underway. The bibliography will allow planners, policymakers, legislators, and other interested parties to make informed decisions about modal choices.

Environmental Regulations, Policy and Guidance

REPORTS • POLICY MEMORANDA • POSITION PAPERS

Users:
Federal, state, and local transportation staff and managers responsible for managing environmental or planning programs

Contact-Field:
Environmental program coordinator in FHWA Division Office

Contact-Headquarters:
Harold Peaks, FHWA, 202/366-1598

A number of publications are available that assist in the implementation of laws and regulations, establish policy, and offer guidance for processing environmental documents.

The publications include:

FHWA/FTA Joint Regulation, "Environmental Impact and Related Procedures." 23 CFR 771, published in Federal Register 8/28/87.

"Guidance for Preparing and Processing Environmental and Section 4(f) Documents." FHWA Technical Advisory, T6640.8A (10/30/87).

"Environmental Policy Statement." FHWA policy (4/20/90).

"Revised Guidance on Cooperating Agencies." FHWA memorandum (3/19/92).

"Applying the Section 404 Permit Process to Federal-Aid Highway Projects." (Red Book, published 9/88 by FHWA).

"Section 4(f) Policy Paper" for implementation of Section 4(f) of the 1966 Department of Transportation Act. FHWA policy (9/23/80).

Guidance for Addressing "Purpose and Need in Environmental Documents." FHWA memorandum (9/18/90).

Position Paper on "Secondary and Cumulative Impact Assessment in the Highway Project Development Process." FHWA (5/7/92).

"The Development of Logical Project Termini." FHWA (1994).

Environmental Training Center (Managing the Environmental Process)

COURSE (Group Registration; see page 52)

Users:
Federal, state, and local transportation staff and managers responsible for managing environmental and planning programs. Participants should have a basic knowledge of federal environmental regulations.

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Robert Wheeler, FHWA, 202/366-2029

Course Number:
14228

This 3-week training program is intended to provide students with the tools needed to manage the environmental process for transportation agencies. The Environmental Training Center will focus on methods to fully integrate environmental considerations into agency policies, procedures, and the decisionmaking process. The course emphasizes early and continuous involvement of federal, state, and local governments and the increased role of federal resource agencies (i.e., EPA, Corps of Engineers, Fish and Wildlife Service). Technical requirements for environmental documents using the FHWA/National Environmental Policy Act framework will be addressed in light of the organizational and functional relationships that identify the importance and interrelationship of the various environmental requirements. The goal is to manage the project development process in such a way that good project decisions are made and that environmental objectives are achieved.

Functional Assessment of Wetlands

COURSE (Group registration; see page 52)

Users:
States, MPOs, **environmental consultants**

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Paul Garrett, FHWA, 202/3660-2067

Course Number:
14218

This 2- to 4-day NHI training course teaches techniques to (1) determine the functions and values associated with wetlands, (2) write wetlands assessments, and (3) develop mitigation projects. It provides introductory material on wetlands policy and regulations. The functional assessment of a wetland is done after wetland delineation is completed and is useful in the determining the necessary amount of wetland mitigation.

Fundamentals of Air Quality for Transportation Planning and Project Development

COURSE (Croup Registration; see page 52)

Available 1995

Users:
Federal, state, and local transportation and air quality personnel

Contact:
Al Miller, NHI, 703/285-2787

Course Number:
14217

This S-day NHI course covers transportation and air quality considerations at both the systems planning and the project development stages of analysis. A combination of lectures, workshops, case studies, and computer exercises provides a discussion of the following topics:

- federal legal and regulatory requirements
- atmospheric and meteorological conditions of concern
- emission trends and characteristics of transportation activities
- analysis techniques at regional and project levels
- documentation and reporting

Guide to the Congestion Mitigation and Air Quality Improvement Program

BROCHURE

Users:
State/local planners and program managers, air quality professionals

Contact:
Michael Savonis, FHWA, at 202/366-2080 **(fax** 202/366-3409**)**

This detailed brochure focuses on the purpose of the congestion management/air quality program, funding eligibility, and its use thus far throughout the country.

Hazardous Waste: Impact on Highway Project Development

COURSE (Group Registration; see page 52)

Users:
States, MPOs, environmental consultants

Contact-Course Information:
George Jones, NHI, 703/285-2776

Contact-Technical information:
Fred Bank, FHWA, 202/366-2070

Course Number:
14229

This 4-day course focuses primarily on the requirements of the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act. The course provides a solid background on application of these laws to the federal-aid highway program. It also discusses the responsibilities of EPA, state agencies, and environmental contractors.

Historic and Archeological Preservation

COURSE (Group Registration; see page 52)

Users:
States, MPOs, environmental consultants

Contact-Course Information:
George Jones, NHI, 703/285-2776

Contact-Technical Information:
Bruce Eberle, FHWA, 202/3660-2060

Course Number:
14211

This 3-day NHI course provides information on the National Historic Preservation Act and its 1992 amendments, the requirements that must be met for federal actions, the level of coordination necessary, and case studies. Participants will learn about the operation of the State Historic Preservation Office and the historic preservation responsibilities of the National Park Service and the Advisory Council on Historic Preservation.

IMAGINE-Making Air Quality Crystal Clear

PAMPHLET

Users:
State **and local planners, air quality officials, general public**

Contact:
Alexander Elles-Boyle, FHWA, 202/366-2079
(fax 202/366-3409)

This pamphlet offers a practical look at air quality from the day-to-day, private citizens' perspective.

Manual of Transportation-Air Quality Modeling for Metropolitan Areas

GUIDANCE MANUAL

Users:
State, **local, and MPO planners; FHWA; FTA; EPA**

Contact:
Janet Oakley, NARC, 202/457-0710, or
Alexander Elles-Boyle, FHWA, 202/366-2079

This manual reviews the state of transportation modeling. It primarily focuses on travel demand forecasting and suggests strategies for responding to specific analysis needs (especially with regard to air quality). Prepared under the National Association of Regional Councils Clean Air Project, which is jointly funded by FHWA, FTA, and EPA.

Model for Determining the Water Quality Impact of Highway Runoff

MODEL

Users:
States, **MPOs, environmental consultants**

Contact:
Fred Bank, FHWA, 202/366-5004.

The model allows for better decisionmaking by determining the pollutant loadings from highway runoff and selecting methods for mitigating the pollutants when necessary. The Clean Water Act and **state** laws may require data to justify the issuance of permits and the methods for mitigation (such as

grassy swales and detention basins). The model input consists of such information as rainfall data, average daily traffic, and size of watershed. The model development relied on data collected throughout the United States, including information from the National Urban Runoff Pollution Study conducted by EPA.

NARC Clean Air Project

REPORTS • NEWSLETTER • SEMINARS

Users:
State, **MPO, and local transportation and air quality planners.**

Contact:
Abbe Marner, FTA, 202/366-0096; James Shrouds, FHWA, 202/366-2074; or Patsy Chappelear, NARC, 202/457-0710

This project is intended to coordinate DOT/EPA activities in response to the Clean Air Act Amendments with activities of state, metropolitan, and local planning organizations. In FY 1995 and 1996, the project will support monthly publication of a transportation/clean air newsletter, development of a framework for a public education campaign on clean air, and periodic forums exploring current issues and research needs in transportation and air quality planning. The project is administered through the National Association of Regional Councils and is jointly funded by DOT and EPA.

Noise and Vibration Impact Assessment for Transit Projects

MANUAL • SOFTWARE

Available May 1995

Users:
Acoustics consultants, environmental analysts, planners from state and local transportation agencies

Contact:
Abbe Marner, FTA 202/366-0096 (fax 202/366-7951)

This report will present recommended procedures and methods for analyzing and describing the noise and vibration impacts of proposed transit projects. The report will cover various modes and sources of noise, and it will present techniques that can be used early in the development of a major project, as well as later when site-specific impacts must be identified. Options for mitigating objectionable noise and vibration will also be covered. The guidance manual will be accompanied by a spreadsheet software program to aid users in performing a step-by-step analysis of noise or vibration impacts

Practical Conflict Management: Skills to Resolve Highway/Wetland Issues

COURSE (Group Registration; see page 52)

Users:
Engineers, environmental specialists, transportation planners, others with responsibility for interagency coordination on wetlands and other issues arising in the National Environmental Policy Act Section 404 process.

Contact-Course Information:
Al Miller, NHI, 703/285-2781

Contact-Technical Information:
Florence Mills, FHWA, 202/366-2062

Course Number:
14231

This 3-day course presents practical ways to improve the process of interagency coordination meetings and to manage disagreements between agencies involved in the National Environmental Policy Act 404 process. Such disagreements involve wetlands and other issues related to obtaining a Section 404 permit and may arise early during environmental studies or during application for a Section 404 permit. Course lectures incorporate skills and techniques used by professional negotiators in reaching agreements. The case studies are drawn from actual project experiences in highway/wetlands issues.

Project Development and Environmental Documentation

COURSE (Group Registration; see page 52)

Users:
State and local government personnel (including MPOs, transit operators, and consultants) who prepare and review environmental documents

Contact-Course Information:
Lynn Cadarr, NHI, 703/285-2186

Contact-Technical Information:
Lee Dong, FHWA, 202/366-2054

Course Number:
14205

This comprehensive, 3-day NHI course explains the project development process for federal-aid transportation projects. This process includes location studies, development of project concept from planning through construction, merger of environmental and permitting requirements, interagency coordination, project streamlining and flexibility, corridor preservation, FHWA's cooperating agency policy, FHWA's mitigation and enhancement policy, and Section 4(f) implementation procedures. In addition, detailed information is provided regarding environmental regulations.

Social Equity Research on Historical Transportation Investments

REPORT

Available March 1996

Users:
Federal, state, MPO, and local transportation, housing, and community planners; transit operators; environmental and social justice communities; national low-income and social equity groups

Contact:
Robert Washington, FTA, 202/366-l 694 (fax 202/366-7116), or Don Chen, STPP, 202/939-3471 (fax 202/939-3475)

This project examines the impacts of past transportation investment patterns on transportation policy, land use patterns, and erosion of the transit base. The project is being conducted by the Surface Transportation Policy Project (STPP,) along with the Center for Neighborhood Technology (Chicago) and the Environmental Defense Fund. The final report will include the results of the research as it relates to three representative cities studied: (1) a large midwestern city, (2) a large eastern city, and (3) a medium-sized western city. By examining investment patterns over the past 20 years, the research will determine who has paid for the transportation infrastructure and who has ultimately benefited. ISTEA has introduced new opportunities to invest in transit and encourage transit-oriented land use development. The proposed research will support the promise of ISTEA and ensure a future transportation infrastructure that allows transit to be competitive with automotive travel. The benefit will be to cities and communities that are economically strong and socially responsible.

Transportation and Air Quality Planning Guidelines

REPORT

Users:
State, local, and MPO planners; FHWA; FTA; EPA

Contact:
Robin Miles-McLean, EPA, 313/741-7890, or Kathy Laffey, FHWA, 202/366-2077

This report contains guidance for developing and implementing transportation measures and other measures necessary to demonstrate and maintain attainment of the National Ambient Air Quality Standards. The report was developed under an EPA/FHWA project, in response to Section 108(e) of the Clear Air Act Amendments.

Transportation and the Environment

BIBLIOGRAPHY

Users:
Federal, state, and local transportation planning officials and policymakers; railroad officials

Contact:
Marilyn Klein, FRA, 202/366-0358

This 52-page annotated bibliography is the result of an effort to determine the extent to which models have been developed that permit comparisons among transportation options and the environmental impacts of those options. It covers recent publications that describe or offer insights into the environmental effects of transportation systems and how public policies are addressing transportation-related environmental issues. Its objective is to allow planners, policymakers, legislators, and other interested parties to make better informed decisions about modal choices.

Transportation Programs and Provisions of the Clean Air Act Amendments of 1990

BROCHURE

Users:
Federal, state, and local air quality and transportation officials

Contact:
AlexanderElles-Boyle,FHWA,202/366-2079
(fax 202/366-3409)

This detailed brochure provides an overview of the Clean Air Act Amendments of 1990, a comprehensive assessment of the transportation components of the amendments, and several graphical representations of how the requirements vary by area.

Wetlands and Highways: A National Approach

BOOKLET

Users:
States, MPOs, **environmental personnel, federal agencies, the general public**

Contact:
Ginny Finch, FHWA, 202/366-4258

This booklet offers information about various wetland mitigation banking activities sponsored and developed under the federal-aid highway program.

HIGHWAY-RAIL GRADE CROSSINGS

Guide to Crossing Consolidation and Closure

REPORT

Users:
Federal, state, local, and metropolitan government officials involved in highway-rail transit crossing safety issues.

Contact:
Bruce George, FRA, 202/366-0533

The *Guide to Crossing Consolidation and Closure* addresses the main obstacle to the rationalization of redundant crossings-namely, local opposition. Almost any proposal that involves the closure of a grade crossing is met with local concern about emergency vehicle response time, traffic delays, neighborhood impacts, and public convenience. The guide provides a model for working effectively with local communities to successfully implement a grade-crossing consolidation project.

Highway-Rail Crossing Consolidation: A Public Safety Initiative

REPORT

Users:
Highway authorities and railroad officials who initiate or participate in corridor reviews or crossing consolidation projects in their jurisdictions or on their rail lines

Contact:
Laura O'Connell, FRA, 202/366-6399
(fax 202/366-7592)

This comprehensive reference document provides an overview of the history, purpose, and benefits of crossing consolidation from a highway and railroad perspective. It includes an overview of current state laws and procedures that other states may adopt to facilitate crossing consolidation programs; procedures and resources that state agencies and railroad companies may use to identify crossings for consolidation or elimination and to implement these projects; criteria and language states may use when they consider retaining existing grade crossings or limiting the opening of new crossings; contractual language to prevent grade crossings from being reopened after they are closed; and procedures and issues regarding grade separation of highway-rail crossings.

Highway-Rail Crossing Consolidation: A Public Safety Initiative

BROCHURE

Users:
Personnel of state and local agencies, railroads, trade associations, and safety organizations involved in the planning or promotion of crossing consolidation projects

Contact:
Laura O'Connell, FRA, 202/366-6399
(fax 202/366-7592)

The brochure includes information on the rationale, benefits, and general guidelines regarding the consolidation and elimination of unnecessary and high-risk grade crossings. Staffers of state and local agencies, railroads, trade associations, and safety organizations involved in the planning or promotion of crossing consolidation projects will find the brochure useful as a marketing tool with which to approach mayors and other local officials.

Highway-Rail Crossing Elimination Guidelines

GUIDELINES

Users:
State, **city,** and **county planners**

Contact:
Bruce George, FRA, 202/366-0533

These guidelines provide (1) a means to identify crossings as candidates for elimination, (2) model legislation vesting authority in a state-level entity, and (3) an analytic procedure for assessing the need for a crossing. FRA and FHWA staff are working with the National Conference of State Rail Officials to consider methods to facilitate elimination of one-fourth of the nation's grade crossings, a goal jointly established by FRA and FHWA. This will enable state and local highway authorities to allocate scarce resources to improving or grade-separating the remaining crossings.

Highway-Rail Crossing Resource Allocation Procedure

MODEL

Users:
Federal, state, **and local governments; railroads; planning consultants**

Contact:
Bruce George or Thomas Woll, FRA, 202/366-0533

Highway-rail crossing safety improvements frequently consist of the installation of active motorist warning devices, such as flashing lights and gates. A procedure was developed to assist states and railroads in identifying railroad crossings that will yield the greatest accident reduction benefit, while considering the cost, budget limitations, and effectiveness of the type of warning device. The procedure consists of two analytical models: (1) the accident prediction formula, which computes the expected number of accidents at crossings based on information available in the inventory and crossing accident data files; and (2) the resource allocation model, which selects candidate crossings for improvements based on cost-effectiveness and recommends the type of warning device to be installed. The procedures will assist states and railroads in determining effective allocations of federal funds for highway–rail crossing improvements.

Railroad-Highway Grade Crossing Improvement Program

COURSE (Group Registration; see page 52)

Revision Available January 1995

Users:
Federal, state, **and local transportation agencies responsible for the design, construction, and/or maintenance of railroad-highway crossings**

Contact-Course Information:
Harry Hersey, NHI, 703/285-2778

Contact-Technical Information:
Robert Winans, FHWA, 202/366-4656

Course Number:
38005

This 1- or 2-day NHI course provides training on a systematic approach to developing improvements to railroad-highway grade crossings. Target audiences are those who have interest in, or are directly responsible for, the administration of a highway-rail intersection improvement program. Material will be supported by examples, case studies, and microcomputer workshops. The objective of this course is to provide these audiences with technical instructions on highway-rail intersection improvements, including the selection, installation, and maintenance of highway-rail intersection traffic control devices and crossing surfaces. The Railroad-Highway Grade Crossing Handbook, second edition (1986), will be the principal reference document for this course, and a copy will be made available to each course participant, along with materials that update the handbook.

INTERMODAL CONNECTIONS

Access for Intermodal Facilities

COURSE (Group Registration; see page 52)

Available Early 1995

Users:
FHWA, state, and local planning staff; other individuals directly involved in transportation system planning

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Lee Chimini, FHWA, 202/366-4068

Course Number:
15264

This three-day course focuses on the methodologies and design elements for improving landside access to seaports and airports. It covers both air and rail freight and passenger terminal operations and their interaction with and dependence on landside access facilities. The course discusses tools and techniques necessary to assess the efficiency of intermodal terminal landside access strategies and improvements. Other areas discussed are funding issues and how the Clean Air Act Amendment affects the planning process.

The course is intended to provide a forum to bring together public and private users and operators of terminal and port facilities with state, MPO, and local planners involved in the landside access planning activities for intermodal facilities. It is hoped that a mutual understanding of the importance of access to intermodal facilities will promote the proper consideration of landside access functions in the metropolitan and statewide planning processes.

Access Management, Location, and Design

COURSE (Group Registration; see page 52)

Users:
FHWA, states, MPOs, **and local governments; individuals involved in most aspects of transportation system planning, design, implementation, and maintenance**

Contact-Course Information:
Harry Hersey,' NHI, 703/285-2778

Contact-Technical Information:
Ron Giguere, FHWA, 202/366-2203

Course Number:
15255

This 3-day NHI course provides a comprehensive and detailed discussion of access management along our streets and highways. The general benefits of access control, as well as the social, economic, political, and legal implications, are examined in detail. Existing access management practices and policies from sample states and jurisdictions are presented as examples of what types of programs have been initiated and how effective they have been. At the heart of the course is an in-depth discussion of management techniques and the warrants for their use. A significant portion of the course covers techniques and procedures for evaluating the impacts of access control on the safety and operations of the highway system.

Airport Ground Access Planning Guide

GUIDEBOOK

Users:
Federal and state DOTs, MPOs, **airport consultants and planners, airport authorities**

Available July 1995

Contact:
Lee Chimini, FHWA, 202/366-4068, **or**
Larry Kiernan, FAA, 202-267-8784

This guidebook will review the techniques and procedures that are used for planning ground access, review current modal splits for various sizes of airports, and discuss changes that are taking place in ground access. It will include information on (1) conducting planning studies for airport ground access, given the characteristics of a specific airport and metropolitan area; (2) assessing the impact of new airport ground access facilities on the transportation system; (3) evaluating alternative designs for ground access to airports; and (4) surveying and collecting necessary travel data to conduct airport ground access studies.

Characteristics of Intermodal Terminals

REPORT

Available December 1995

Users:
State and local agencies, transit agencies, MPOs

Contact:
Edward Thomas, FTA, 202/366-0264

This report summarizes the most important characteristics of various intermodal terminals. It serves as a statistical summary for planning and operating purposes. The information is based on terminals with various transit (heavy rail, light rail, commuter rail, and bus), intercity rail, intercity bus, and aviation services. It considers attributes such as levels of service by mode, transfer provisions, characteristics of waiting areas, operating costs, economic activity, capital replacement and rehabilitation costs, transit and auto access, parking facilities, and surrounding land use patterns. The report format is similar to the recently published, Characteristics of Urban Transportation Systems, and it will be periodically updated.

Design of Passenger Facilities for the Orlando Maglev System

REPORT

Users:
Planners and designers of airport ground access systems

Contact:
Zale Anis, **Volpe Center,** 617/494-2184, **or**
Larry Kiernan, FAA, 202/267-8784

This is a case study, administered through VNTSC, of the planning and design of two passenger stations for the proposed Maglev demonstration project at Orlando International Airport. The objective of this project, completed in April 1992, was to document the process of planning and designing passenger stations for airport access, with emphasis on the evolution of functional, programmatic, and design concepts resulting from financial, political, institutional, and technical exigencies.

Evaluation of Intermodal Passenger Transfer Facilities

REPORT

Users:
Transportation planners and engineers

Contact:
Alan J. Horowitz, Univ. of Wisconsin, 414/229-6685, **or**
Dane Ismart, **FHWA,** 202/366-4071

The report, *Evaluation of Intermodal Passenger Transfer Facilities*, contains opinions of a large number of transit system users and planners. It presents an array of methods for preliminary design, location, and evaluation of intermodal passenger transfer facilities. It documents a unified set of tools for evaluating the effectiveness of intermodal passenger facilities so that they can be readily applied by practicing transportation planners and engineers.

Feasibility of Developing an Intermodal Freight Model for Massachusetts

MODEL

Available January 1995

Users:
State, **MPO, and local planners**

Contact:
Dane Ismatt, FHWA, 202/366-4071

A model for intermodal freight transport for Massachusetts will be developed, beginning with the creation of a commodity travel survey. Specifications for the model will be identified, such as impedance functions, path and intermodal transfer choices, and information on network link flows for use in calibration of models or direct estimation.

Fire Safety of Passenger Trains—A Review of U.S. and Foreign Approaches

REPORT

Users:
Amtrak, commuter rail operators, bus operators, state and local governments, MPOs, host railroads, other intermodal corridor participants

Contact:
Robert McCown, FRA, 202/366-0462

Although this report is specific to railroad vehicles, the analysis and conclusions presented are to a large degree applicable to any multipassenger carrying vehicle, such as buses and people movers. The report presents a detailed comparison of fire safety approaches used for passenger trains in the United States, France, and Germany. Strengths and weaknesses of current methods for measuring fire performance are discussed. An optimum systems approach to fire safety, which addresses typical fire scenarios, is analyzed. A major conclusion is that fire hazard and fire risk assessment methods supported by measurement methods based on heat release rate provide a means to better predict real world fire behavior.

Gage Restraint Measurement System (GRMS)

REPORTS

Users:
Federal, state, and local governments; railroads

Contact:
William Paxton, FRA, 202/366-0465, or
Mahmood Fateh, FRA, 202/366-0459

The ultimate goal of the Gage Restraint Measurement System (GRMS) is to develop an automated, objective, performance-based track gage strength inspection system that would improve safety and maintenance planning. The system has been under development for approximately 10 years, in collaboration with VNTSC. In terms of its basic technology, GRMS is a new nondestructive prototype railroad track inspection system. It can objectively measure a track's ability to maintain gage under service load conditions. It utilizes a telescoping axle (split-axle) to apply a known lateral force to the rail at operating speeds of up to 30 mph. Sensors record the applied lateral load and the resultant lateral deflection, which is indicative of the relative risk of wide-gage derailment for the tested track.

Impact of Intermodal Freight Movements on Highway Infrastructure, Capacity, and Productivity

REPORT • DATABASE

Users:
Federal, state, MPO, and local transportation planners; trade organizations

Contact:
Susan Binder, FHWA, 202/366-9230, or
Dr. Bahar Norris, Volpe Center, 617/494-2150

The report identifies existing problems and options for implementing improvements in the highway/truck intermodal system and identifying policy implications. It includes a database on highway/truck intermodal interface facilities, markets, carriers, shippers and commodities, terminal access, shipment coordination, and state and federal regulations.

Impediments to Container Movements

REPORT • CONFERENCES

Conferences Available Spring 1995

Report Available Fall 1995

Users:
State **DOTs, MPOs, transportation industry**

Contact:
Larry Dwyer, FHWA, 202/366-0150

Conferences will be held to identify regional impediments to efficient intermodal transfer of containers and trailers and to develop possible solutions. The report will identify bottlenecks and barriers to efficient intermodal operations and describe and evaluate technologies for improving intermodal operations. Guidelines will cover investment decisions involving infrastructure improvements, reducing trucking congestion, improving intermodal operations, establishing performance

standards, and evaluating the economic and social tradeoffs involving the costs of constructing a new facility and the benefits of reducing environmental externalities.

Intelligent Vehicle-Highway Systems/ Landside Airport Access

REPORT

Available January 1996

Users:
State **DOTs, MPOs, airport planners and consultants**

Contact:
Lee Chimini, FHWA, 202/366-4068

The report will discuss a wide range of intelligent vehicle-highway systems and responsive multimodal transportation management strategies aimed at improving landside access to airports.

Intermodal Freight

VIDEOTAPE

Users:
States, MPOs, **local planners, shippers, carriers, ports**

Contact:
Richard Walker, MARAD, **202**/366-4357

The primary objective of this videotape is to educate **state** and local planners about the importance of freight, the components needed to transport that freight on a seamless and efficient intermodal freight transportation system, and what can be done at a local level to improve the existing system.

Intermodal Transportation Access to U.S. Ports

REPORTS

Users:
Port planners; state, MPO, and local planners

Contact:
Capt. James Carman, MARAD, 202/366-4357

These reports are a compilation of individual port site visit reports written as a result of the activities of a Departmental Interagency Working Group. The reports served as background material in the investigation of landside access problems and potential solutions facing U.S. ports.

Inventory of American Intermodal Equipment

REPORT • DATABASE

Available December 1994

Users:
Federal agencies, carriers, shippers

Contact:
Thomas Morelli, MARAD, 202/366-4357

The Maritime Administration conducts an annual survey of American intermodal marine equipment owned and controlled by U.S. marine carriers and leasing companies. The inventory includes containers, chassis, trailers, and container and roll on-roll off vessels and barges. The inventory provides aggregated data that are essential to both the government and the transportation industry in planning for the most efficient use of our nation's intermodal equipment. The inventory also provides data for planning the shipment of intermodal military cargoes.

Landside Access to Ports

REPORTS

Users:
Port agencies and planners; state, MPO, and local planners

Contact:
Capt. James Carman, MARAD, 202/366-4357

A Transportation Research Board study on landside access to ports determined that intense non-maritime land use competition in port areas was acting to limit the development of adequate terminal facilities and routes for rail and highway access. These reports are intended to persuade port and local planners to prepare for the future by establishing maritime zones and routes. Reports include: Access to U.S. Ports: Phase I, General Cargo Ports, TRB, 1992; and Landside Access to Ports, TRB, 1993 (Final Report).

Maritime System of the Americas: Intermodal Operation of Oceangoing Vessels and the Feasibility of Short-Sea Vessel Operation

REPORT

Available January 1995

Users:
Port authorities, importers/exporters, carriers, freight forwarders/customhouse brokers

Contact:
Doris J. Bautch, MARAD, 202/366-4357

This report addresses the potential for conventional and short-sea shipping, as well as intermodal operations on the Maritime System of the Americas (MSA). MSA refers to the waterway system that connects central portions of the United States and Canada to the central and eastern portions of Mexico, Central America, the Caribbean countries, and the northern rim of South America.

Maritime System of the Americas: River/ Ocean Operations

REPORT

Users:
Port authorities, importers/exporters, carriers, freight forwarders/customhouse brokers

Contact:
Doris J. Bautch, MARAD, 202/366-4357

This report examines the feasibility for river/ocean vessels and river barges on the Maritime System of the Americas (MSA). MSA refers to the waterway system that connects central portions of the United States and Canada to the central and eastern portions of Mexico, Central America, the Caribbean countries, and the northern rim of South America.

Measuring Ground Access to Airports

REPORT

Available December 1994

Users:
Planners and designers of airport ground access systems

Contact:
Zale Anis, Volpe Center, 617/494-2184, or
Larry Kiernan, FAA, 202/267-8784

This report will describe the methodology used to assess the accessibility, in terms of travel time, of major airports to surrounding metropolitan areas. It will include an "accessibility index" for each of the large hub airports in the United States. The accessibility indices will be useful in describing airport accessibility, comparing airports, identifying trends, and estimating the effects of proposed improvements to highway and transit systems. The objective of this project is to develop and implement a standard technique for expressing the "reachability" of major commercial service airports. This project is part of an assessment of capital investment needs for airports in the United States.

National Conference on the Intermodal Freight Terminal of the Future

PROCEEDINGS

Available Early 1995

Users:
Public- and private-sector planners and operators of freight terminals

Contact:
Richard Walker, MARAD, 202/366-4357, or
Christina Casgar, TRB, 202/334-3205

This conference (held in New Orleans, LA, in December 1994) brought North American and European leaders in intermodal freight activities together to discuss state-of-the-art issues in terminal design and operation, with a special focus on information technologies.

New Denver Airport Mobility Study

GUIDELINES

Available June 1995

Users:
City, transit agency, MPO, and airport planners and developers

Contact:
Effie Stallsmith, FTA, 202/366-5653

These guidelines will assist in developing the airport corridor in a manner that promotes transit use and access. They identify design criteria for transit facilities on and off the airport grounds. These facilities include pedestrian ways, waiting areas, park-and-ride lots, transit centers, and street and highway access. Land use designs more conducive to transit riders and access by transit vehicles are other important areas. Key concepts addressed include the encouragement of on-site services, concentration of mixed-use development along the transit routes, reduction of building setbacks, and implementation of locally supported land use and zoning policies.

Notebook Computer Software for Collecting Trip Generation Data at Intermodal Passenger and Freight Terminal Facilities

SOFTWARE • **DATABASE • REPORT**

Available 1996

Users:
Transportation planners, MPOs, state and local governments, intermodal facility operators and planners

Contact:
Lee Chimini, FHWA, 202/366-4068

In the past, emphasis was given to research and development of trip generation rates for hundreds of land uses. Little research was conducted in the area of intermodal passenger and freight terminal facilities. With the current emphasis on addressing the efficiency of intermodal facilities, there is a great need for these data and, more important, for software that would allow the data to be collected using notebook computers. Notebook computer software will be developed for collecting trip generation data at intermodal facilities. The project will develop software and establish procedures for the collection, collation, and development of trip generation and attraction rates and equations for sample intermodal facilities.

Port Facilities Inventory

DATABASE

Users:
Federal, state, and local government agencies

Contact:
William Dean, MARAD, 202/366-4357

The Maritime Administration maintains a database describing the physical characteristics and capabilities of approximately 4200 U.S. coastal and inland river marine terminal facilities. The data include information on terminal location, owner, operator, pier dimensions, handling equipment, and storage capacity. The coastal terminals are geographically referenced by latitude and longitude. Plans call for adding longitude and latitude information to river terminals so they can be used in a geographical information system.

Port Intermodal Movement

VIDEOTAPE

Available January 1995

Users:
Shippers; state, MPO and local planners

Contact:
Capt. James Carman, MARAD, 202/366-4357

The objectives of the videotape are to increase awareness and demonstrate the vital importance of U.S. ports to intermodal transfer activity, as well as to our economy and national security, and to show the critical role that ready access between ports and the surface transportation system can play in ensuring an efficient and cost-effective intermodal freight transportation system.

Ports Needs Study (Vessel Traffic Services Benefits)

REPORT

Users:
Port agencies; state, MPO, and local planners

Contact:
Sandy Cross, USCG, 202/267-l 510

This report documents the benefits and costs of Coast Guard Vessel Traffic Services in 23 selected ports on the Atlantic, Gulf, and Pacific coasts. The report includes a comprehensive cost-benefit model that considers the far-reaching consequences of marine accidents.

Recommended Emergency Preparedness Guidelines for Passenger Trains

REPORT

Users:
Amtrak commuter rail operators, state and local governments, MPOs, host railroads, other high-speed-rail corridor participants

Contact:
Robert McCown, FRA, 202/366-0462

The information contained in this document is intended to assist passenger train system operators to assess, develop, document, and improve their emergency response capabilities and to coordinate these efforts with emergency response organizations in a manner that best protects the traveling public and system passenger trains and facilities. These recommendations provide a framework for organizations to evaluate and, if necessary, modify or supplement their emergency preparedness plans and procedures, training, and passenger train and wayside facility equipment. Coverage of passenger station and control center issues has direct relevance to intermodal emergency preparedness facility planning.

Review of Ground Access to Selected European Airports

REPORT

Available December 1994

Users:
Airport ground access **planners; airport authorities; state, MPO, and local planners**

Contact:
Zale Anis, **Volpe Center,** 617/494-2184, **or Larry Kiernan, FAA,** 202/267-8784

This report reviews airport access in Europe, including prominent applications of rail and transit, identifying the principal factors that affect their market share. It is intended to provide insight into the relative success of rail and transit access to European airports and highlight principles that are applicable to U.S. systems.

Safety of High-Speed Rail—intrusion Barrier Design Study

REPORT

Users:
Amtrak, commuter rail operators, state and local governments, MPOs, host railroads, other high-speed-rail corridor participants

Contact:
Robert McCown, FRA, 202/366-0462

FRA is working to create the necessary technical information to facilitate the joint use of transportation rights-of-way, be they railroad, highway, pipeline, or some other right-of-way with the potential for joint usage. This report details the various methods for minimizing the hazard of intrusions into guideways by other modes when rights-of-way are shared. The information is relevant to rights-of-way conflicts often found in and around intermodal facilities. The feasibility of preventing errant railroad or highway vehicles from intruding into the operational space of a high-speed-rail guideway from an adjacent or overhead facility is detailed. Preventing derailed high-speed-rail vehicles from intruding on other rights-of-way is also covered. An analysis method is presented and prototype designs are shown in the report. Barrier construction costs are also detailed.

Safety of High-Speed Rail Passenger Trains in Freight Railroad Corridors

REPORT

Users:
Amtrak, commuter rail operators, state and local governments, MPOs, host railroads, other high-speed-rail corridor participants

Contact:
Robert McCown, FRA, 202/366-0462

FRA is working to create the necessary technical information to facilitate the use of railroad trackage and terminals for both existing freight service and expanded or new high-speed passenger service. This report presents detailed information on how train control and other related systems can potentially improve the safety of mixed passenger and freight operations. Predictive accident rate calculations for different configurations have been developed based on FRA accident data. Devices with the potential for reducing the accident risk are noted. Cost/benefit information to assist in device selection and application is presented. A simplified computer model to study line capacity constraints for different corridor configurations and operation scenarios is also included in this report.

U.S. Coast Guard Bridge Administration Program

PERMITS

Users:
Federal, state, and local governments; private parties that wish to construct or own and operate bridges across the navigable waters of the United States

Contact:
Nick Mpras, USCG, 202/267-0368

The USCG's Bridge Administration Program implements the several acts of Congress that put the navigable waters of the United States under the exclusive control of the United States, thereby preventing bridges from impairing or interfering with waterborne foreign and interstate commerce. National security needs are considered part of the foreign commerce of the United States. These responsibilities are implemented by issuing permits for the construction or modification of bridges, ordering the alteration or removal of unreasonably obstructive bridges, regulating bridge navigational lighting and the operation of movable bridges, and considering the impact these actions may have on the international, national, and local transportation systems and the quality of the human environment. In administering the bridge program, the Coast Guard ensures that the national transportation goals are met by considering and balancing the often competing modes of land and marine transportation.

PUBLIC OUTREACH/PARTICIPATION

Building New Partnerships: The Railroad Industry and Metropolitan Planning Organizations

REPORT

Users:
State and local governments, MPOs, railroads

Contact:
Donald Ostrander, NARC, 202/457-0710, or
Robert Martin, FRA, 202/366-0359

This report describes how FRA and NARC are working to improve relationships between MPOs and railroads by developing case studies on successful rail/MPO projects. The case studies demonstrate the potential for cooperation.

Community Empowerment and the ISTEA Process

CASE STUDIES

Available December 1995

Users:
Community and public interest groups and other organizations interested in participating in transportation planning and decision making; MPOs; state transportation agencies

Contact:
John Witmer, FTA, 202/366-l 685 (fax 202/366-7116), or
Laura Olsen, STPP, 202/939-3470 (fax 202/939-3475)

Case studies will be conducted on the following organizations: People Organized in Defense of the Earth and her Resources (PODER), Austin, TX; Metropolitan Energy Center, Kansas City, MO; Neighborhood Transportation Network, Minneapolis, MN; Environmental Justice Alliance, New York, NY; and Montana Transportation Project, Bozeman, MT. The Surface Transportation Policy Project (STPP) will provide technical assistance to the organizations to help them understand the planning process, transportation projects, and issues and develop strategies to influence plans and investment decisions. Each organization will prepare a case study documenting its effort, including successes and barriers encountered.

Improving the Effectiveness of Public Meetings and Hearings

COURSE (Group Registration; see page 52)

Users:
State and local government personnel who plan or conduct public meetings and hearings

Contact-Course Information:
George Jones, NHI, 703/285-2776

Contact-Technical Information:
Florence Mills, FHWA, 202/366-2062

Course Number:
14213

This 2-day workshop emphasizes practical techniques and processes for organizing and conducting public meetings and hearings. It is designed to increase participants' knowledge of methods to enhance the effectiveness of public meetings and hearings.

Working Together on Transportation Planning: A Guide to Collaborative Decision Making

MANUAL

Available February 1995

Users:
MPOs, transit operators, state and local governments, public interest groups, private-sector organizations

Contact:
William Menczer, FTA, 202/366-4060
(fax 202/366-7116), or
Donald Ostrander, NARC, 202/457-0710
(fax 202/296-9352)

This new manual, *Working Together on Transportation Planning: A Guide to Collaborative Decision Making,* will identify the best practices for MPOs to use to collaborate more effectively on transportation planning activities with the communities and businesses they serve. It will help MPOs understand and apply collaborative decisionmaking models in developing long-range plans and transportation improvement programs. ISTEA requires early and inclusive public involvement in transportation planning. This report will provide information on methods of improving the participation of transportation stakeholders in the planning process used by MPOs to make important planning and programming decisions.

TRANSPORTATION AND LAND USE

Case Study Analyses of the Impacts of Alternative Land Use and Transportation Policies on System Performance and Air Quality

REPORTS

Available December 1994

Users:
State and local planners and policymakers

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076, **or Frederick** Ducca, **FHWA,** 202/366-0182 **(fax 202/366-371 3)**

The reports contain case studies evaluating the positive and negative impacts of alternative combinations of transportation policies and land use policies.

Cities in the Balance: Creating the Transit-Friendly Environment

VIDEOTAPE

Users:
States, MPOs, **local planners, transit agencies, developers, academics**

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951)

This videotape uses interviews and examples of auto-oriented development and transit-oriented development to show differences in design, transportation impacts, and accessibility. The videotape shows numerous examples of integrated development and transit service around the United States to illustrate the benefits of transit-oriented development. Produced by the San Diego Metropolitan Transit Development Board.

Efficient Suburban Activity Centers

HANDBOOK

Available October 1995

Users:
State, MPO, and local planners

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

The purpose of this research is to develop a handbook that state and local governments can use to direct the evolution of transportation-efficient suburban activity centers through strategic site design improvements. Included will be prototypes of physical designs, zoning, site design standards, parking regulations, travel demand reduction ordinances, etcetera. Application of the designs and strategies will be demonstrated through case studies.

Guide to Land Use and Public Transportation for Snohomish County, Washington, Volume I

REPORT

Users:
States, MPOs, **local planners, transit agencies, developers, academics.**

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951)

This report documents the relationship among transit service types, land use density, land use design, and transit-compatible design principles. It examines different types of transit and congestion management systems and the coordination of transportation and land use planning at the site plan and subdivision level. Written by the Snohomish County Transportation Authority, December 1989.

Guide to Land Use and Public Transportation for Snohomish County, Washington, Volume II

REPORT

Users:
States, MPOs, local planners, transit agencies, developers, academics

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951**)**

This is a follow-up report to Volume I. Volume II reaches a much greater level of detail than Volume I, with illustrative examples of different land use types, such as shopping centers, office buildings, small-scale residential subdivisions, and retrofitting existing land uses for transit. The report also details policies to encourage transit-compatible land use planning and barriers to transit-oriented development. Written by the Snohomish County Transportation Authority, December 1993.

Guidelines for Transit-Sensitive Suburban Land Use Design

REPORT

Users:
States, MPOs, local planners, transit agencies, developers, academics

Contact:
Dwayne Weeks, FTA, 202/366-0096 **(fax** 202/**366-7951)**

This report contains policy guidelines (for both transit and land use) designed to encourage pedestrian access and transit ridership at the administrative and district level. It also considers implementation measures. Written by Harvey Rabinowitz and Edward Beimborn, Center for Urban Transportation Studies, University of Wisconsin-Milwaukee, July 1991.

Land Use Policies and Public Infrastructure and Service Costs

REPORT

Available FY 1996

Users:
State, MPO, and local planners; policymakers

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

This study will develop a system to account for public and social costs and benefits of alternative land use and transportation policies. Social costs will include environmental consequences, as well as impacts on cultural, recreational, and other community resources. The incidence of costs and benefits will also be evaluated. The study will produce a handbook describing procedures to account for all costs and benefits of transportation policies and a report evaluating alternative policies.

Measuring the Land Use and Economic Development Impacts of Fixed Guideway Transit

REPORT

Available Fall 1995

Users:
State, **MPO, and local planners**

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951**)**

This report documents the land use and economic development impacts of existing transit facilities. It is intended to help planners determine the potential impacts of new fixed guideway transit on land use and the potential for economic development around transit station sites. A number of existing rail, busway, and people-mover systems were studied. Other factors contributing to the impact are identified.

Metrorail Station Area Planning: A Metrorail Before-and-After Study Report

REPORT

Users:
States, MPOs, local planners, transit agencies, developers, academics

Contact:
Dwayne Weeks, FTA, 202/366-0096 (fax 202/366-7951)

Report Number:
DOT-T-83-50

This study documents the experiences of the Washington Metropolitan Transit Authority (WMATA) in working to obtain joint development at transit stations during the construction of the WMATA heavy rail system. Written by Metropolitan Washington Council of Governments, August 1983.

New Suburb, The

REPORT

Users:
States, MPOs, **local planners, transit agencies, developers, academics**

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951)

Report Number:
DOT-T-91 -12

This report is an analysis of new suburban land use designs intended to reduce dependency on the single-occupant vehicle. The report profiles a number of proposed suburban development projects and details the strategies used in the designs to encourage transit use. Written by Harvey Rabinowitz and Edward Beimborn, Center for Urban Transportation Studies, University of Wisconsin-Milwaukee, July 1991.

Site Design and Demand Management

REPORT

Available December 1994

Users:
State, **MPO, and local planners; FHWA**

Contact:
Frederick Ducca, FHWA, 202/366-0182

This report will discuss the relationship between urban design and demand management. Data on urban design is cross-classified with demand management to determine the effects of urban design on demand management and transit. The project, administered through Cambridge Systematics, Inc., is part of FHWA's Travel Model Improvement Program.

Transit Supportive Development in the United States: Experiences and Prospects

REPORT

Users:
States, MPOs, **local planners, transit agencies, developers, academics**

Contact:
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-7951)

Report Number:
DOT-T-94-08

This report will help local transportation planners, land use planners, government officials, developers, and citizens understand the relationship between transit-oriented development, transit service, and transportation mode share on a local, site-specific, and regional scale. The study documents the transportation impacts of transit-oriented development at sites throughout the United States. Written by Dr. Robert Cervero, University of California, Berkeley, December 1993.

TRANSPORTATION PLANNING

Before-and-After Study of the Virginia Railway Express

REPORT

Available Spring 1995

Users:
State, MPO, and local planners

Contact:
Dwayne Weeks, FTA, 202/366-0096

The Virginia Railway Express began commuter rail service between Northern Virginia and Washington, D.C., in June 1992. This first report analyzes "pre–Virginia Railway Express" conditions pertaining to travel behavior, mode split, transportation impacts, and land use development. A future report will analyze how those conditions might have changed as a result of the Virginia Railway Express. The study will eventually demonstrate the ability of commuter rail operations to attract single-occupant vehicle users, reduce congestion, and influence development patterns by providing information on the impacts of the railway service on those conditions.

Case Studies for Corridor Planning

REPORT

Available December 1994

Users:
State, **MPO, and local planners**

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

Case studies are used to demonstrate the principles of good corridor planning. Case studies will be drawn from previous studies for corridor analyses, including those done for the alternatives analysis process required by FTA for transit projects, the environmental impact statement process required by FHWA for highway projects, and other corridor-level studies. To demonstrate the principles in a cohesive manner, the research will identify the best practices from past studies, as well as new features incorporating the spirit of ISTEA and the DOT staff's initial thinking as to how the new DOT regulations may be implemented.

Conversion Factors for the Use of Census Data

HANDBOOK

Available December 1994

Users:
MPO, state **and local planners**

Contact:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

Transportation Planner's Handbook on Conversion Factors for the Use of Census Data includes a set of factors for converting census journey to work data to data usable for transportation planning applications. The conversion factors are based on an analysis of urbanized area home interview data, transit on-board passenger survey data, and NPTS data, in conjunction with CTPP data.

Corridor Preservation for Technical Staff

COURSE (Group Registration; see page 52)

Users:
Technical staff involved in project development, planning, and right-of-way functions at the federal, state, **and local levels**

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Robert Wheeler, FHWA, 202/366-2029

Contact-Right-of-Way Information:
Robert Johnson, FHWA, 202/366-2020

Course Number:
15130

This NHI course explains the objectives of corridor preservation and presents case studies illustrating the application of corridor preservation efforts. Topics covered include: nature and magnitude of the problem, impact of the National Environmental Policy Act, use of products from the transportation planning process, land use controls, and public/private partnerships. Case studies identify various approaches to corridor preservation and various types of land use controls.

Equilibrium in Travel Forecasting

REPORT

Available Fall 1995

Users:
State, MPO, and local planners

Contact:
Frederick Ducca, **FHWA,** 202/366-0182
(fax 202/366-3713)

This project, administered through the Portland Metropolitan Services Division (an MPO), is part of FHWA's Travel Model Improvement Program. It looks at equilibrium issues in the travel forecasting process and focuses on feedback from the assignment process to mode split, trip distribution, and land use forecasting. Testing is being done under different traffic and congestion scenarios.

Estimating the Impacts of Transportation Alternatives

COURSE (Group Registration; see page 52)

Users:
State, **MPO, and local planners**

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

Course Number:
15257

This 3-day NHI course provides participants with guidelines for selecting criteria to measure attainment of economic, social, and environmental objectives for multimodal transportation alternatives. To estimate these measures for system, corridor, and project-level analysis, sketch planning procedures are demonstrated using case study workshop examples for highway and transit modes, as well as for travel demand management strategies, Topics covered include estimation of public and private costs; air pollutant emissions; energy consumption; safety/security, economic development, equity and other social and environmental impacts; and techniques for cost-benefit and cost-effectiveness analysis. The course demonstrates techniques to present the evaluation results in a manner easily comprehensible by the public and community decisionmakers.

Financial Capacity Analysis Model for MPOs

MODEL

Available December 1995

Users:
MPOs, state **agencies, transit agencies**

Contact:
Edward Thomas, FTA, 202/366-0264

The National Association of Regional Councils, in cooperation with the San Francisco Bay Area Metropolitan Transportation Commission, developed a Lotus 1-2-3–based model for assessing financial capacity. Once cost and revenue data are entered in the model, the model can project asset replacement requirements, account for different intergovernmental grants, analyze alternative financing strategies, and indicate the ability of local and state transportation agencies to meet future capital, operating, and maintenance funding requirements. The model, called "Finance Plan," summarizes complex multimodal financing, for quickly and simply determining the financial consequences of changes in project construction schedules, inflation, interest rate assumptions, revenue forecasts, and projected cost increases.

Financial Planning and Programming for MPOs

COURSE (Individual Registration; see page 52)

Users:
States, MPOs, **local planners, transit agencies, developers, academics**

Contact:
Neil Denno, **NTI, 908/932-I 700, or**
Dwayne Weeks, FTA, 202/366-0096
(fax 202/366-795 **1)**

This training course addresses the financial planning requirements of ISTEA and the metropolitan and statewide planning regulations published in October 1993. The primary focus of the course is the financial constraint requirements of the planning regulations on transportation improvement programs and long-range plans produced by MPOs. Written by the National Transit Institute.

Flexible Funding Opportunities (for Transportation Investments), FY 1995

REPORT

Available January 1995

Users:
FTA, FHWA, state DOTs, MPOs, **and transit operator planning, programming, and management staff, as well as the general public and groups interested in federal funding for transportation investments**

Contact:
Sean Libberton, FTA, 202/366-0055
(fax 202/366-7951)

The fourth annual edition of FTA's Flexible Funding Opportunities for Transit will be produced jointly with FHWA and will focus on the flexibility of ISTEA provisions as they apply to all multimodal transportation investments. The report will describe the flexible federal highway and transit grant programs and will summarize the ISTEA planning requirements and FTA and FHWA procedures for administering these flexible funds.

Flexible/Innovative Funding

WORKSHOPS

Users:
State, **MPO, and local planners; elected officials**

Contact:
Richard Steinmann, FTA, 202/366-4060
(fax 202/366-7116)

This is the final year of a 3-year cooperative agreement with the American Public Transit Association and the Government Finance Officers Association to provide outreach workshops to state and local planners on the flexible funding made available by ISTEA. These workshops focus on the changes in planning process requirements of ISTEA, with a focus on participation elements, the eligibility of projects, case studies of successful efforts at multimodal project selection, and opportunities for innovative funding.

Highway Project Traffic Forecasting

COURSE (Group Registration; see page 52)

Users:
State and local planning and design technical staffs

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Inform&ion:
Doug Laird, FHWA, 202/366-5972

Course Number:
15251

This 3-day NHI course presents the technical relationships between the system planning and project development processes..It focuses on effective use of products of the planning process to support decisionmaking at the project level and to provide input for project "purpose and need." Major topics include refinement of computerized traffic forecasts and other "post processing" techniques, developing design-hour volumes, intersection analysis, safety analysis, and developing traffic data for air quality analysis. It is intended to enable participants to use outputs of urban travel demand forecasting models more effectively.

Improved Highway Travel Considerations for an Aging Population

COURSE (Group Registration; see page 52)

Users:
Federal, state, MPO, and local planners

Contact-Course Information:
Lynn Cadarr, NHI, 703/285-2186

Contact-Technical Information:
Hal Lunenfeld, FHWA, 202/366-2217

Course Number:
13353

This l-day NHI course is designed for planners who provide transit and transportation services for aging drivers, pedestrians, and transit users. It provides participants with detailed information concerning their problems and needs. Upon completion of the course, participants should be more aware of the problems and needs of aging drivers and pedestrians, have a better understanding of important aging population issues, be able to identify current and future research and development programs for aging drivers and pedestrians, and be able to identify and apply aging driver and pedestrian countermeasures.

Improving Transit Market Research Practice

MANUAL

Available Fall 1995

Users:
State, **MPO, and local planners**

Contact:
Candace Noonan, **FTA,** 202/366-6385

Transit has become a more significant part of modern communities in light of mandates and new funding opportunities originating in such legislation as the Clean Air Act Amendments, the Americans with Disabilities Act, and ISTEA. This manual will discuss the implementation of different methods and techniques for doing market research for various types of transit services (i.e., express bus, E&H services, jitneys). It is designed to assist communities conduct an accurate market analysis to help them in their transit decisionmaking. Successful market analysis techniques used by the transit industry will be discussed, as will techniques used by other industries that can be adapted to the transit markets.

Incorporating Feedback in Travel Forecasting

HANDBOOK

Available Spring 1995

Users:
State, **MPO, and local planners**

Contact:
Barry Zimmer, FHWA, 202/366-4082

The purpose of this research effort is to investigate the use and introduction of practical feedback mechanisms in typical state-of-the practice travel forecasting procedures. Specifically, the handbook will

- determine regulatory requirements and practical implications of feedback mechanisms
- explore pitfalls and develop tests for them
- provide guidance to practitioners

Intelligent Vehicle-Highway Systems (IVHS) Planning and Functional Requirements—An Overview

COURSE (Group Registration; see page 52)

Available Winter 1994

Users:
State **and local agencies and** MPOs

Contact:
CourseScheduling—**Lynn Cadarr, NHI,** 703/285-2186;
Course Coordination-Harry Hersey, NHI, 703/285-2778;
Technical information-Shelley Lynch, FHWA, 202/366-2184.

Course Number:
13373

This 3-day NHI training course was prepared by FHWA to aid local agencies in their planning activities for intelligent vehicle-highway systems (IVHS) deployment. The course reviews the IVHS planning

process and focuses on a top-down approach to IVHS applications at the local level. The course emphasizes the need to assess IVHS applications from a multimodal perspective. The course also provides a review of the technologies currently available.

Intelligent Vehicle-Highway Systems (IVHS) Planning and Project Deployment Process

REPORT

Users:
State, **local, MPO, and private-sector transportation professionals**

Contact:
Shelley Lynch, FHWA, 202/366-2184

This report was prepared as an aid to transportation professionals interested in implementing IVHS services in their area. The paper outlines a needs-based approach to planning for IVHS deployment. The paper uses two flowcharts to describe the basic steps in IVHS planning: needs analysis, coalition building, user service identification, functional requirements and architecture; and development of a local strategic deployment plan.

Intermodal Management Systems for Managers

COURSE (Group Registration; see page 52)

Users:
State, MPO, and local planners

Contact:
Dane Ismart **or Larry Dwyer, FHWA,** 202/366-0150

Course Number:
15262

This course is designed to provide a basic understanding of the legislation and regulations relative to intermodal management. It offers basic guidance on the design, implementation, and administration of intermodal management systems.

Intermodal Management Systems for Technical Staff

COURSE

Users:
Practitioners responsible for designing and implementing intermodal management systems

Contact:
Dane Ismatt or Larry Dwyer, FHWA, 202/366-0150

Course Number:
15263

This course covers in detail the administration and implementation of an intermodal management system.

Introduction to Urban Travel Demand Forecasting

COURSE (Group Registration; see page 52)

Users:
State, MPO, and local planners; FHWA personnel relatively new to planning who wish to gain a better understanding of the principles and techniques of travel demand forecasting

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Field Course:
Barry Zimmer, FHWA, 202/366-4082

Course Number:
15254

This 4-day NHI course is an introduction to travel demand forecasting. It has been updated to integrate new concerns of ISTEA and the Clean Air Act Amendments. It covers the traditional four-step planning process of trip generation, trip distribution, mode choice, and traffic assignment. It also covers information needs and the development of networks and zone structures. This course is offered both in the field and at FHWA headquarters in Washington DC. The headquarters course includes a software demonstration. There are two options to the field course. It can be presented (1) using the microcomputer package used by the host agency to reinforce the theory taught, or (2) as a noncomputerized course with hand-solved workshop problems.

ISTEA and Intermodal Planning: Concept, Practice, Vision

REPORT

Users:
State and **local transportation planners**

Contact:
The report is available from the Transportation Research Board, 202/334- **3214 (fax** 202/334-2519)

Report Number:
SR204

In 1992, the U.S. DOT sponsored a conference on ISTEA and intermodal planning issues. The conference findings are synthesized in this report, which also includes the text of each formal presentaton made at the conference and summaries of the panel discussions.

Major Investment Studies

COURSE (Individual Registration; see page 52)

Available February 1995

Users:
State, **MPO, and transit agency planning managers**

Contact:
Linda Howe, NTI, 908/932-l 700

This 3-day training course introduces participants to the Major Investment Study (MIS) requirements and their technical components. Topics include the linkages among MIS, long-range planning, and the National Environmental Policy Act process; interagency relationships; public involvement; and technical issues, such as the development of a multimodal set of alternatives, analysis of impacts, and cross-modal evaluation. In 1995, 12 courses are planned; 8 will be offered during 1996.

MARAD ISTEA Implementation

BROCHURE • COMPENDIUM

Users:
Port agencies; state, MPO, and **local planners**

Contact:
Richard Walker, MARAD, 202/366-4357

The port community will find the brochure and compendium sources of timely information on the opportunities within ISTEA for addressing specific port-related policies and projects. The documents present a strategic focus for accomplishing the objective of ensuring that port projects and plans are considered through metropolitan and statewide planning programs. The compendium includes reports from 16 individual ports.

Methodologies for Evaluating Bus Transit and High-Occupancy Vehicle Fixed Cuideway Investments

REPORT

Available June 1995

Users:
State and local planners and policymakers

Contact:
Dane Ismart, **FHWA,** 202/366-4071, **or**
Patrick DeCorla-Souza, **FHWA,** 202/366-4076
(fax 202/366-3713)

The objective of this project is to assess the investment worthiness of high-occupancy vehicle projects when evaluated according to the methodologies of FTA and the American Association of State Highway and Transportation Officials, as well as variations on these methodologies. The research will identify biases and inadequacies in the various methodologies and offer recommendations for revisions and future action. To demonstrate the effects of different evaluation methods on project priorities, data from

the recently completed fixed guideway systems planning study in Oklahoma City will be used. Several HOV projects were analyzed in the study, and FTA cost-benefit indices were computed. These indices were very influential in corridor screening, which goes to the heart of this research: Would project priorities be different if another evaluation technique had been used? The research involves six tasks in two phases. Phase I, Development of Base Data, includes Task 1, specify evaluation measures; Task 2, year 2010 travel forecasts; and Task 3, local benefit measures. Phase II, Evaluating HOV Projects, includes Task 4, compute evaluation measures; Task 5, assess the methodologies; and Task 6, project administration and reporting. An interim report will be produced at the end of Phase I, documenting the evaluation measures selected for detailed study, the results of the travel demand modeling effort, and the local benefit factors. A final report will document methodologies, their advantages and disadvantages, and offer recommendations. The project is administered through the University of Oklahoma and Oklahoma DOT.

Model Improvement Evaluation

REPORTS

Users:
State, **MPO, and local planners; FHWA; contractors on model development**

Contact:
Frederick Ducca, FHWA, 202/366-0182
(fax 202/366-3713)

This project, administered through the Texas Transportation Institute, is part of FHWA's Travel Model Improvement Program. It supports the model improvement effort by providing for the dissemination of results and providing support for a review panel to oversee and give comments on the model development.

Multi-Criteria Assignment

REPORT • MODEL

Available June 1995

Users:
State, **MPO, and local planners; software developers**

Contact:
Frederick Ducca, FHWA, 202/366-0182
(fax 202/366-3713)

An improved traffic assignment model will be produced under this project, as part of FHWA's Travel Model Improvement Program. Dynamic (time-of-day) assignment techniques will be developed. Pathfinding on combined highway and transit networks will be accomplished considering both time and cost. The value-of-time parameter used to convert travel time to a dollar value is a random variable, with a probability density function, so that it more accurately reflects the range of time values in a given population. The project is administered through the Volpe Center.

National Conference on Intermodalism: Making the Case, Making It Happen

PROCEEDINGS

Available Early 1995

Users:
Planners in state and local highway agencies and MPOs

Contact:
Richard Walker, MARAD, 202/366-4357, **or**
Christina Casgar, TRB, 202/334-3205

This conference highlighted best-case practices in intermodalism and the new ISTEA intermodal philosophy as it relates to day-to-day operations of MPOs, **state** DOTs, and planning officials. Best-case practices fall into the broad categories of institutional issues; partnerships, cross-modal analysis, quality of service, and performance measures; and financial arrangements. The conference was held in New Orleans, LA, in December 1994.

National Port Readiness Network

TECHNICAL ASSISTANCE AND INFORMATION

Users:
Federal, state, municipal port authority, and local port planners

Contact:
Comdr. Rob Lorigan, USCG, 202/267-0497

The Coast Guard, as a member of the National Port Readiness Network, can assist port planners in developing and updating port readiness plans that support the movement of military personnel and cargo in the event of a national defense contingency, natural disaster, or mobilization. The Coast Guard has particular expertise in port safety/port security areas; vessel cargo including bulk, containerized waterfront facility regulations; port emergency response; and vessel movement control.

Operations Planning Guidance

REPORT

Available Spring 1995

Users:
State, MPO, and local planners

Contact:
Nancy Grubb, FTA, 202/366-0096 **(fax** 202/366-7951)

In evaluating future transit alternatives for a corridor, it is critically important that the operating plans be properly developed. This report will provide guidance on good planning practices for developing long-range transit operating plans. Topics to be covered include design of feeder bus and timed-transfer routes, collector and line-haul considerations for high-occupancy vehicle lanes, analysis of travel time data, and integration of express and local routes. This guidance will supplement FTA's project planning guidance titled Procedures and Technical Methods for Transit Project Planning.

Performance Measures for Intermodal Management Systems

WORKSHOPS • GUIDEBOOK

Users:
State, MPO, and local planners

Contact:
Dane Ismart, **FHWA,** 202/366-4071

Information on performance measures for intermodal management systems are being disseminated through workshops across the country. The comments from the workshop participants will be consolidated into briefing papers, and that information will then be packaged in a guidebook for identifying common performance measures.

Public Policy for Freight Transportation—Phase One

REPORT

Available Summer 1995

Users:
Policymakers at the federal, state, and local level; transportation planners

Contact:
Arthur Jacoby, **FHWA,** 202/366-9248

The report will contain an assessment of the feasibility of a comprehensive economic analysis of freight transportation external costs; preliminary estimates of the scale of these external costs; and, if warranted, recommendations about the technical approach and tasks that should compose a comprehensive analysis. The project is administered through the Transportation Research Board (TRB) of the National Academy of Sciences. A committee was convened to explore the potential usefulness and feasibility of a comprehensive baseline study of freight transportation to measure the subsidies provided to freight modes and the external costs of freight transportation and to assess the consequences of such subsidies and external costs on the amount of freight traffic and its distribution among modes.

Quick Response Freight Manual

MANUAL • SOFTWARE

Available January 1996

Users:
State, MPO, and local planners; private-sector transportation professionals

Contact:
Dane Ismart, FHWA, 202/366-4071

This project will result in both a manual and computer procedure to develop freight forecasts at the **state,** urbanized area, corridor, and site levels. The forecasts will be useful in evaluating site impacts and modifying travel demand forecasting models to reflect freight trips. The techniques for using the forecasts in these applications will also be described.

Railroad and Freight Transportation Planning

SEMINARS (Individual Registration)

Users:
State, **MPO, and local planners**

Contact:
Robert Martin, FRA, 202/366-0359

A series of three seminars on rail-oriented transportation planning covers passenger and freight issues, intermodal issues, and freight transportation. The seminars are aimed at planners responsible for developing state and MPO intermodal transportation plans under ISTEA, with the objective of giving them better grounding in rail issues.

Review of Transportation Planning Processes in Metropolitan Areas

REPORTS

Users:
Local MPOs, FTA, FHWA

Contact:
Deborah Burns, FTA, 202/366-I 637

FTA and FHWA have oversight responsibilities for urban planning processes and therefore need to review and evaluate those planning processes. This is accomplished through periodic policy and committee meeting attendance and through review of related program documentation, such as unified planning work programs, technical reports, and transportation improvement plans. Using periodic process reviews as another appropriate mechanism, FTA and FHWA have started reviewing the largest 33 urbanized areas. This effort, administered through VNTSC, will continue over the next 2-3 years. The objective of this effort is to look at the overall decisionmaking and planning process in light of ISTEA and the Clean Air Act Amendment requirements.

Short-Term Improvements to Travel Demand Models

MANUAL • REPORTS

Users:
State, **MPO, and local planners**

Contact:
Frederick Ducca, FHWA, 202/366-0182, or Ronald Jensen-Fisher, FTA, 202/366-0096

This consists of a program of projects oriented to making improvements in the four-step travel demand forecasting process. It is part of the DOT's initiative known as the Travel Model Improvement Program. The purpose of this project is to improve travel forecasting to assist states and MPOs in responding to the Clean Air Act Amendments, ISTEA, and travel behavioral changes that have occurred in recent years. The project consists of both improving existing forecasting procedures and developing new ones.

Site Impact Analysis and Assessment

COURSE (Group Registration; see page TK)

Available Spring 1995

Users:
State, MPO, and local planners

Contact:
Brian Gardner, FHWA, 202/366-4061

This course will cover site impact analysis and assessment. Upon completion of the course, each participant should be able to: understand and apply the recommended practices for estimating and evaluating the traffic impacts for a given site and understand the recommended techniques for developing and applying traffic impact assessments; effectively review, evaluate, and critique a site traffic impact analysis; select impact fee assessment techniques appropriate for their area and the development type; and grasp the social, legal, and economic ramifications associated with impact fees. The course will be of interest to state and local transportation planning staff responsible for reviewing traffic impact studies submitted by developers, site planners, and transportation systems planners.

South Atlantic Container Study

REPORT

Users:
Federal, state, and local government planners; water and land transportation operators; shippers; importers

Contact:
Capt. James Carman, MARAD, 202/366-4357

An in-depth study of the projected flow of foreign trade containers expected to move through ports from Norfolk to Miami formed the basis for this report. The scope of the study required a forecast of international trade to the year 2050, analysis of movements between U.S. trading partners in that period, regional changes in demographic and economic conditions affecting trade, the inland origins and destinations of commodity movements, and the comparative intermodal costs over alternate trade routes to determine coastal ranges of entry or export.

Statewide Highway Planning Procedures

COURSE (Group Registration; see page 52)

Users:
State and regional planners

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical information:
Dee Spann, FHWA, 202/366-4086

Course Number:
15127

This 3- to 4-day NHI course on the statewide highway planning process has been modified to include intermodal planning aspects, ISTEA, corridor planning, and preliminary material on management systems. The main sessions cover long-range planning, data collection, travel forecasting, systems planning, and project planning. It is a fast-paced review of the state-of-the-practice.

Statewide Transportation Planning

COURSE (Group and Individual Registration; see page 52)

Pilot Available Late 1995; Course Available 1996

Users:
State and regional planners

Contact:
Dee Spann, FHWA, 202/366-4086

This l-week training course pulls together available information on procedures to support statewide transportation planning processes to meet the ISTEA

legislative requirements, including the 23 mandated planning factors. The course incorporates the early experiences of selected state DOTs in developing a 20-year statewide transportation plan and statewide transportation improvement program. It is oriented to staff involved in statewide transportation planning, including state DOTs and modal partners (railroads, bus companies, trucking companies, ports, shippers).

Study of Successful Transit Systems

REPORT

Available Spring 1995

Users:
State, MPO, and local planners

Contact:
Nancy Grubb, FTA, 202/366-0096 (fax 202/366-7951)

This report will identify the factors that lead to an increase in transit ridership. Transit systems studied include those in Houston and San Diego.

Symposia on Rail, Intermodalism, and ISTEA

SYMPOSIUMS **(Individual Registration; see page 52)**

Users:
State **and local planners, railroads, and others involved in transportation issues.**

Contact:
Robert Martin, FRA, 202/366-0359

A series of nine 2-day symposiums jointly sponsored by FRA and FHWA cover the opportunities under the provisions of ISTEA for state and local transportation planners to work together with the railroad community. Topics include: ISTEA intermodal planning, project and funding eligibility, role of railroads in relieving congestion and in meeting clean air requirements, rail safety issues, and the railroads' view of ISTEA.

Synthesis of Model State Intermodal Transportation Plans

REPORT

Available June 1995

Users:
State DOTS, MPOs

Contact:
Lee Chimini, FHWA, 202/366-4068

The report will serve as a best-practices guide for statewide intermodal planning efforts. It will discuss statewide intermodal planning processes and performance measures based on data availability. States will find the information helpful in developing their statewide planning efforts.

Transportation Simulation (TRANSIMS)

REPORT • PROTOTYPE SOFTWARE

Available FY 1998

Users:
State, MPO, and local planners

Contact:
Frederick Ducca, FHWA, 202/366-0182

TRANSIMS will be a prototype transportation analysis package that merges travel demand forecasting, traffic simulation, and air-quality analysis. It will provide many improved integrated capabilities, including congestion and incident effects, detailed air-quality impact analysis, intermodal systems analysis, and technology investment analysis. The project, administered through the Los Alamos National Laboratories, is part of FHWA's Travel Model Improvement Program. It is a large, multi-year effort to design the next generation of travel forecasting procedures. The project will develop a transportation analysis framework composed of mutually supporting simulation models and databases that employ advanced computational and analytical techniques. Interim products and reports will be available.

1995 American Travel Survey

DATA TABULATIONS • REPORTS

Available September/October 1996

Users:
DOT policy officials; Congress; state, MPO, and local planners; travel and tourism industry

Contact:
Philip Fulton, BTS, 202/366-3282 (fax 202/366-3640)

The survey will measure interstate and intermetropolitan passenger travel nationwide by trip and traveler characteristics for all modes and for intermodal combinations. The objective of the survey is to provide basic information about the quantity and geography of passenger movements by all modes.

Application of Geographic Information Systems for Transportation

COURSE (Group Registration; see page 52)

Users:
State **transportation departments, MPOs, local planners**

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Roger Petzold, FHWA, 202/366-4074

Course Number:
15129

A geographic information system (GIS) is a system of hardware, software, data, personnel, organizations, and institutional arrangements for collecting, storing, analyzing, and disseminating information about areas of the earth. The Geographic Information System for Transportation (GIST) adapts that technology to transportation issues specific to the management and analysis of transportation networks. This 3-day NHI course provides an introduction to GIS-T and specific examples of the GIS being applied to transportation.

Current Use of Geographic Information Systems in Transit Planning-An Update

REPORT

Available Fall 1995

Users:
FTA, FHWA, states, MPOs, transit planners

Contact:
Paul Verchinski, FTA, 202/366-l 626
(fax 202/366-795 1)

This report will update the Current Use of Geographic Information Systems (GIS) in Transit Planning, which was issued in August 1991. It will reflect progress made by transit agencies and MPOs in GIS applications since 1991 and include information on new applications being used by those organizations.

Directory of Transportation Data Sources

DATABASE • REPORT

Users:
Federal, state, and local transportation data users

Contact:
Kathleen Bradley or Philip Fulton, BTS, 202/366-3282
(fax 202/366-3640)

The directory is a compilation of publicly available transportation databases and publications developed within the federal government, as well **as** private-industry sources of transportation data and Canadian and Mexican data sources. The directory is available free of charge by calling the BTS product request line at 202/366-3282 or by faxing your request **to** 202/366-3640.

8th Annual Geographic Information System for Transportation Symposium

CONFERENCE (Individual Registration; see page 52)

APRIL 2-5, 1995, RENO, NEVADA

Users:
Federal, state, MPO, and local transportation professionals

Sponsors:
American Association of State Highway and Transportation Officials, National Association of Regional Councils, Transportation Research Board, Urban and Regional Information System Association, FHWA, and others

Coordinator:
Roger Petzold, FHWA, 202/366-4074

A conference on the application of geographic information system (GIS) technology to transportation is held annually. The conference includes workshops, plenary sessions, presentations sessions, user group meetings, and vendor show. Last year approximately 400 people from 45 states attended the conference. The main focus is an exchange of information on the latest GIS technology and practical applications for transportation. It is the only GIS conference that focuses specifically on transportation.

Federal, State, and Local Transportation Financial Statistics, Fiscal Years 1982-1992

DATABASE/REPORT

Available January 1995

Users:
Congress; federal, state, and local governments; private industry

Contact:
Jean Wooster, Volpe Center, 617/494-2209, or Rolf Schmitt, BTS, 202/366-3282 (fax 202/366-3640)

This product, available on CD-ROM, will identify and detail federal, state, and local transportation expenditures and revenues and provide time series data to recognize trends. The data will be available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Highway-Rail Crossing Accidents/Incidents

DATABASE

Users:
State, MPO, and local planners; FRA; railroads; Operation Lifesaver

Contact:
Stan Ellis, FRA, 202/366-2760

The database contains records of all collisions between highway users and railroad equipment at rail-highway grade crossings. It is available on tape or diskette. FRA maintains the database, which is useful for safety and planning analyses. Statistics are compiled to determine and target high-risk crossings so resources can be allocated for improvements.

Highway-Rail Crossing Inventory Program

DATA PRINTOUTS

Users:
Federal, state, and local government officials; railroads; planning consultants

Contact:
Bruce George or Thomas Woll, FRA, 202/366-4656

The U.S. Highway-Rail Crossing Inventory was completed in 1975 as a result of a concerted federal, **state,** and railroad effort to inventory all crossings in the nation. Each crossing was assigned a unique number. Information regarding the type, location, and physical and operational characteristics was collected and keyed into a computer database. The inventory is used for reporting accidents, and the data is used for analyzing crossing improvement projects. The FRA assumed the responsibility of custodian of the inventory database, while the states and railroads have endeavored to keep the records current on a voluntary basis. Currently, there are approximately 325,000 crossings nationwide. The objective of this program is to allow the federal government, states, and railroads to identify a specific crossing and analyze data regarding identification, physical, and operational characteristics of any and all crossings.

National Transportation Statistics Report

DATABASE • REPORT

Users:
Federal, state, and local transportation users

Contact:
Kathleen Bradley or Philip Fulton, BTS, 202/366-3282 **(fax** 202/366-3640**)**

This publication, which is updated annually, is a compendium of U.S. transportation statistics from 1960 to 1993. Data illustrate transportation activity for the major modes of transportation-i.e., air, automobile, bus, truck, transit, rail, water, and pipeline. Basic descriptors such as operating revenues/expenses, number of vehicles and employees, vehicle- and passenger-miles, and passenger and freight operations are included. Transportation trends in performance, safety, motor vehicle sales, production, and costs are also presented. Supplemental information on transportation and the economy, energy consumption, energy intensiveness, energy transport, and energy supply and demand are also included. The data are available in printed form, or as tabulated data in Lotus l-2-3 and Excel file formats on computer disk. The data are available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

North American Transportation: Statistics on Canadian, Mexican, and United States Transportation

REPORT

Users:
U.S. DOT; Canadian and Mexican policy officials; federal, state, and local governments

Contact:
Rolf Schmitt, BTS, 202/366-3282 **(fax** 202/366-3640**)**

This publication contains extensive data on the size and scope, use, employment, fuel consumption, and economic role of the U.S., Canadian, and Mexican transportation systems. Much of the data are for 1990; however, time series data for 1987 to 1991 are included where possible. Statistics are provided in both metric and U.S. measures when appropriate. The publication is available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Railroad Geographic Information System

DATABASES

Users:
Federal, state, and local governments; transportation analysts and planners; FRA, railroads

Contact:
Carl Fischer, FRA, 202/366-0365
For databases on CD-ROM, contact BTS, 202/366-3282

FRA has developed a geographic information system (GIS) for the national railroad network. The GIS manages extensive databases of geographically referenced information associated with over 160,000 miles of railroad lines. The railroad GIS constitutes an accurate computerized representation of all rail lines at a 1:2,000,000 scale and includes pertinent information such as ownership, trackage rights, traffic volumes, passenger service, and defense essential designation. Some data elements are not in the public domain. The databases facilitate the performance of traffic simulations and the analysis of rail, intermodal, and multimodal issues.

Railroad Waybill Sample

DATABASE

Users:
Federal, state, and local governments; transportation analysts and planners; FRA; railroads

Contact:
James Nash, ICC, 202/927-6196, or Peter Kerr, FRA, 202/366-0366. For public use database on CD ROM, contact BTS, 202/554-3564.

This database contains information on rail traffic flow patterns. It is based on the Carload Waybill Sample, which is a proprietary sample of freight waybills submitted by Class I railroads to the Interstate Commerce Commission (ICC). The sample includes information for railroad movements showing origination and termination points, participating railroads, interchange locations, commodities, and volume. The sample is available, free of charge, from the BTS product request line at 202/**366-3282** (fax 202/366-3640)

State and Metropolitan Analysis for Regional Transportation (SMART)

DATABASE ON CD-ROM

Available Early 1995

Users:
State DOTS, MPOs, general public

Contact:
Bob Zarnetske, BTS, 202/366-5081 (fax 202/366-3640)

In cooperation with FHWA and FTA, BTS recently began collecting information to develop a technical information base for transportation planners. The purpose of the SMART database is to gather the collective wisdom of the transportation planning community and to make the materials generated by MPOs and DOTs easy to use and share. A wide range of materials-such as reference documents, video clips, software packages, travel models, dissertations, surveys, and data sets-have already been collected. A prototype CD-ROM will be available in early 1995 and will contain "how-to" reference materials submitted by MPOs and state DOTs, as well as material produced by FHWA and FTA. If the materials prove to be useful, BTS will produce and maintain a more extensive reference library for transportation planners that will contain statistics and a variety of tools for analysis.

Statistical Information Line

DATA LINE

Users:
Federal, state, and local transportation data users

Contact:
Kathleen Bradley or Philip Fulton, BTS, 202-366-3282 (fax 202/366-3640)

Statistical transportation information is available through a toll-free telephone number (800/853-1351) to answer public inquiries relating to transportation information. This service provides both modal and multimodal transportation statistics, including operational, financial, and physical characteristics of the industry. It also responds to inquiries of a more general nature, and provides referrals as needed.

Surface Transborder Commodity Data

DATABASE

Users:
DOT, state, MPO, and local government managers interested in transborder freight flows

Contact:
Joel Palley, FRA, 202/366-0348, or Rolf Schmitt, BTS, 202/366-3282 (fax 202/366-3640)

Freight flow data for U.S. imports and exports to and from Canada and Mexico are available on diskette in dBase format. The Bureau of the Census provides the BTS with unpublished freight flow data by commodity type and by mode of transportation (rail, truck, or pipeline) for U.S. exports and imports to and from Canada and Mexico. The purpose of this program is to provide information needed to monitor increased traffic associated with the North American Free Trade Agreement and provide border communities with better data for planning transportation improvements. The transborder diskettes are available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Telephone Contacts for Users of Federal Transportation Statistics

DIRECTORY

Users:
Federal, state, and local transportation data users

Contact:
Kathleen Bradley or Philip Fulton, BTS, 202/366-3282 (fax 202/366-3640)

This directory contains the name, telephone number, and subject matter expertise (or mode) of federal employees knowledgeable in transportation statistics. The listing-in dBase viewer format or hard copy-is available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Transportation Acronym Guide (TAG)

DATABASE • REPORT

Users:
Federal, state, and local transportation users

Contact:
Pamela O'Leary, Volpe Center, 617/494-2078 (fax 617/494-3064), or Kathleen Bradley, BTS, 202/366-3282 (fax 202/366-3640)

This publication (in printed and dBase formats) contains transportation acronyms and their referents used throughout the federal government. The acronyms were identified from the sources cited in the 1993 edition of the *Directory of Transportation Data Sources.* The publication and diskette are available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Transportation Data Sampler-2

DATABASE

Contact:
Rolf Schmitt, BTS, 202/366-3282

The Transportation Data Sampler-2 is an introduction to a variety of information sources in the U.S. DOT, Oak Ridge National Laboratory, Interstate Commerce Commission, and U.S. Army Corps of Engineers. Sampler-2, packaged on a CD-ROM, is an update to the Transportation Data Sampler released in 1993 (no longer available), with the addition of search-and-retrieval software. The entire language for the Intermodal Surface Transportation Efficiency Act of 1991 and the Clean Air Act Amendments is also included. Sampler-2 is available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Transportation Expressions

DATABASE • REPORT

Users:
Federal, state, and local transportation users

Contact:
Pamela O'Leary, Volpe Center, 617/494-2078 (fax 617/494-3064), or Kathleen Bradley, BTS, 202/366-3282 (fax 202/366-3640)

This publication contains transportation terms and definitions used throughout the federal government. The terms were identified from the sources cited in the 1993 edition of the *Directory of Transportation Data Sources.* The publication (in printed and dBase formats) is available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

Transportation Statistics Annual Report (TSAR)

REPORT

Users:
DOT policy officials; Congress; federal, state, and local planners

Contact:
Rolf Schmitt, BTS, 202/366-3282 **(fax** 202/366-3640)

The *Transportation Statistics Annual Report* (TSAR) examines all four transportation modes-airways, highways, railways, and waterways-using available data and statistical studies. In addition, it takes a closer look at the statistics themselves and identifies obstacles to attaining both quantity of, and quality in, information on transportation in the United **States.** A better understanding of the performance of the transportation system and the potential for its improvement requires both better coverage and increased quality of existing data. This report highlights attempts toward the design and implementation of better measures to transform existing and new data into useful information. The publication is updated annually in January and is available free of charge by calling the BTS product request line at 202/366-3282, or by faxing your request to 202/366-3640.

TRANSPORTATION CONTROL MEASURES/ TRAVEL DEMAND MANAGEMENT

Accommodating Transit in HOV Design

GUIDANCE MANUAL • CONFERENCES • JOURNAL ARTICLES

Available Summer 1995

Users:
State, MPO, and local planners

Contact:
Nancy Crubb, FTA, 202/366-0096 **(fax** 202/366-7951)

The ISTEA prohibition on using flexible highway funds for single-occupancy vehicle (SOV) projects in nonattainment areas will lead to much greater emphasis on high-occupancy vehicle (HOV) facilities. Guidance is needed on how best to incorporate transit facilities and operations into HOV facilities design. This project will develop a guidance manual on issues such as: (1) the number, location, and design of transit centers or stations; (2) T-ramps or other means to provide bus access between the HOVway and transit centers; (3) signalization options on HOV arterial facilities that give buses priority or allow buses to maneuver across lanes to make turns or pick-up; and (4) investments in bus fleet expansion to provide new or enhanced service. This will ensure that state transportation departments, who traditionally spend FHWA funds strictly on highway projects, are aware of information on how to accommodate transit in their designs.

Advanced Travel Demand Forecasting

COURSE (Group Registration; see page 52)

Available Spring 1995

Users:
Federal, state, and local transportation planning and air quality agency personnel

Contact-Course Information:
Al Miller, NHI, 703/285-2787

Contact-Technical Information:
Patrick DeCorla-Souza, **FHWA,** 202/366-4076 **(fax** 202/366-3713)

Course Number:
15260

This 3-day NHI course emphasizes advanced practices for system level modeling and analysis of travel demand management (TDM) and transportation control measures (TCMs). It focuses on analysis of multimodal infrastructure investment, transportation/land use policies, and transportation system indicators required by the mobile source emissions modeling process. Topics covered include state-of-the-art procedures for land use forecasting, travel demand modeling, and estimation of TDM/TCM impacts for both regional and project-level application.

Costs and Effectiveness of Transportation Control Measures (TCMs): A Review and Analysis of the Literature

REPORT

Users:
Transportation planners, regional policymakers, engineers

Contact:
Michael Koontz, FHWA, 202/366-0639 **(fax** 202/366-3409)

This report reflects actual experience with transportation control measures. Although most examples reflect specific local conditions, planners and policymakers will find the information valuable as it captures real responses to regional transportation strategies.

Design and Application of Travel Demand Management (TDM) Techniques Including Telecommuting Programs

COURSES (Group Registration; see page 52)

Available Spring 1995

Users:
State, local, and private-sector transportation professionals

Contact:
Wayne Berman, FHWA, 202/366-4069

Course Number:
13369— **Design and Application of TDM, Including Telecommunications**
13370— **Design and Application of TDM, Excluding Telecommunications**
13371— **Design and Application of Telecommunication Projects**

These NHI courses are designed to assist individuals in the public and private sectors who are responsible for implementing transportation demand management (TDM) and telecommuting programs. The courses will help these individuals understand the concepts of TDM and how to effectively plan, design, implement, operate, and evaluate TDM and telecommuting projects. The courses will also provide assistance on the use of the latest guidance materials and technical tools developed by FHWA and FTA for analyzing TDM and telecommuting.

High-Occupancy Vehicle (HOV) Facilities Planning, Design, Implementation, Operations, and Evaluation

COURSE (Group Registration; see page 52)

Available August 1995

Users:
State, MPO, and local planners

Contact:
Jerry Emerson, FHWA, 202/366-2221

Course Number:
13372

This 3-day NHI course is designed to assist individuals in the public and private sectors who are responsible for implementing high-occupancy vehicle (HOV) projects. Upon completion of the course, each participant should have a better understanding of the concepts of HOV facilities and how they can be applied; knowledge of what is needed to successfully plan, design, market, implement, operate, and evaluate effective HOV facilities; and an understanding of how to use the guidance materials and technical tools.

Implementing Effective Travel Demand Management (TDM) Measures

GUIDEBOOKS • SYNTHESIS REPORT • MODEL • VIDEOTAPE

Users:
State, **MPO, and local transportation professionals and private-sector employers**

Contact:
Wayne Berman, FHWA, 202/366-4069, **or**
Joseph Goodman, FTA, 202/366-0240

This project is designed to provide technical assistance guidance materials and analysis tools to individuals in the public and private sector who are responsible for planning and implementing travel demand management (TDM) programs-i.e., programs to increase the use of carpools, vanpools, and public transit at an employment site, at an activity center, along a corridor, or within an area. The materials consist of a TDM program reference document and synthesis of experience report, an

employer guidance manual, a TDM planning guidance manual, a TDM effectiveness microcomputer model, a data collection and evaluation guidance manual, and a promotional videotape. Requests for the computer model should be directed to McTrans, University of Florida, Gainesville, 904/392-0378.

Joint FTA/FHWA Operational Action Program for Improving Mobility

REPORTS

Users:
State **and local governments,** MPOs

Contact:
Joseph Goodman, FTA, 202/366-0240, or
Wayne Berman, FHWA, 202/366-4069

The reports document cooperative intermodal demonstration projects that foster the implementation of an array of comprehensive, well-planned, low-cost strategies to reduce congestion and improve mobility and air quality on a regional basis.

Transportation Control Measure Information Documents

REPORTS

Users:
State, **local, and MPO planners; FHWA; FTA; EPA**

Contact:
Mark Simons, EPA, 313/668-4420, or
Alexander Elles-Boyle, FHWA, 202/366-2079

This series of synthesis reports focuses on the transportation control measures included in Section 108 (f) of the Clean Air Act Amendments. Descriptions of the various strategies, together with information on implementation and resources, are included. The reports were developed by EPA and FHWA.

Workshop on Transportation—Air Quality Analysis

COURSE (Group Registration; see page 52)

Users:
Federal, state, and local transportation and air quality personnel

Contact:
Jerry Everett, FHWA, 202/366-4079, or
Patrick DeCorla-Souza, FHWA, 202/366-4076 (fax 202/366-3713)

Course Number:
15265

This 2-day NHI course provides an introduction to travel demand and emissions modeling and analysis of travel demand management and transportation control measures. It focuses on transportation system indicators required by the mobile source emissions modeling process and on the estimation of vehicle miles of travel for emissions inventories and conformity analysis. Topics covered include state-of-the-practice procedures for travel demand modeling using the four-step process, estimation of the impacts of travel demand management and transportation control measures, and air quality analysis procedures for regional application.

RESOURCE CENTERS

(For a listing of DOT intermodal resources, see inside back cover)

Centralized Technology Sharing Program

REPORTS

Users:
State, MPO, and local planners and policymaking officials

Contact:
Document Control Center, RSPA, 202/366-4208

To Request a Report:

Single copies: **Send a self-addressed mailing label with your request to the Technology Sharing Program, USDOT, Publications Division (M-45.3), Washington, DC 20590.**

Bulk **orders: Contact the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; telephone 703/487-4650.**

To request a list of available reports: **Contact the Technology Sharing Program (DRT-10), U.S. Department of Transportation, Washington, DC 20590.**

Reports from DOT's research and development program that deal with priority issues and concerns raised by state and local governments are available through this program, which acts as an information clearinghouse. The program also disseminates innovative federal, state, and local government products to a national audience and promotes development of technical assistance mechanisms throughout DOT. The objective of the program is to support more effective state and local government decisionmaking and, through that, more effective use of federal grant funds, by making available, at no cost, technical materials and reports that bear on the process. The active inventory of this program contains some 250 studies on a range of modal and intermodal topics. About 20 to 30 reports are issued each year.

The following are representative documents available through the DOT Centralized Technology Sharing Program:

Advanced Public Transportation Systems: State of the Art-Update '94, DOT-T-94-09

An Assessment of Travel Demand Management Approaches at Suburban Activity Centers, DOT-T-92-06, July 1989

Business Community Transportation Management Program, Lessons from Charlotte, North Carolina, DOT-T-94-07

Characteris tics of Urban Transportation Demand (An Update), DOT-T-88-18, July 1988

Characteris tics of Urban Transportation Sys terns (Revised Edition), DOT-T-93-07, September 1992

Current Use of Geographic Information Systems in Transit Planning, DOT-T-92-02, August 1991

Effects of Added Transportation Capacity, Conference Proceedings, DOT-T-94-12, December 199 1

Estimates of Urban Roadway Congestion-l 990, DOT-T-94-01, March 1993

Evaluation of Travel Demand Management Measures to Relieve Congestion, DOT-T-90- 14, February 1990

Guidelines for Transit-Sensitive Suburban Land Use Design, DOT-T-91-13, May 1991

Iden tifica tion of Transportation Planning Data Requirements in Federal Legislation, DOT-T-94-21, July 1994

Implementing Effective Travel Demand Management Measures: Inventory of Measures and Synthesis of Experience, DOT-T-94-02, September 1993

Increasing the Productivity of the Nations Urban Transportation Infrastructure: Measures to Increase Transit Use and Carpooling, DOT-T-92-17, January 1992

Linking Goods Movement and Economic Development: A Case Study Analysis, DOT-I-85-36, December 1984

New Approaches to Travel Forecasting Models: A Synthesis of Four Research Proposals, DOT-T-94-l 5, January 1994

A Self-Instructing Course in Disaggregate Mode Choice Modeling, DOT-T-93-18, September 1986

Transit-Linked Development: A Case Study in Atlanta3 MARTA System, DOT-I-85-24, January 1985

Transit-Supportive Development in the United States: Experiences and Prospects, DOT-T-94-08, December 1993

Transportation Implications of Telecommuting, April 1993

Uptown Hous ton Comprehensive Transportation Strategy, DOT-T-93-27, March 1991

Urban Transportation Planning in the United States: An Historical Overview (Revised Edition), DOT-T-93-02, November 1992

Urban Rail Transit Projects: Forecast Versus Actual Rider-ship and Cost, DOT-T-91-04, October 1990

Community/Corridor Traffic Safety Programs

COURSE AND TECHNICAL ASSISTANCE

Users:
State, **MPO, and local planners**

Contact:
Barbara Sauers, NHTSA, 202/366-0144

This activity is intended to promote and support community/corridor traffic safety initiatives through training, technical assistance, and collaboration and coordination at the state, regional, and local levels. The training course gives state and local highway safety professionals information and skills to implement local highway safety programs. The outreach program provides technical assistance and linkages with existing state and local traffic safety initiatives. Intended primarily for state and local highway safety professionals, the course will also be of interest to state, MPO, and local planners concerned with community/corridor traffic safety considerations in intermodal transportation planning.

Consortium for Regional Mobility

DIRECTORY • REPORTS • CONFERENCES • WORKSHOPS • NEWSLETTER

Users:
State, **MPO, and local planners**

Contact:
Gwen Cooper, FTA, 202/366-0198

The Consortium was formed to improve the dissemination of knowledge about regional mobility issues. It provides a forum for the exchange of regional mobility-related information among professional organizations concerned with identifying and implementing solutions to common regional mobility problems. The Consortium is composed of the American Public Works Association, Association for Commuter Transportation, Institute of Transportation Engineers, National Association of Counties, National Association of Regional Councils, and Virginia Department of Transportation. It publishes a quarterly newsletter *(Mobility Time)* and monologues on specific solutions that could aid in reducing congestion, while at the same time improving air quality.

Selected products from Consortium members include a directory of MPOs; an issue brief, *Combating Congestion: Policy Options for Local Officials; Mobility Facts;* "Tackling Gridlock," a special issue of *ITE Journal* dedicated to innovative efforts for improving regional mobility in urban areas; and numerous conferences and workshops that have focused on regional mobility, air quality, and commuter transportation issues.

National Bicyclist and Pedestrian Clearinghouse

REPORTS

Users
State, **MPO, and local planners; federal agencies; transportation, recreation, and safety professionals**

Contact:
Peter Moe, NBPC, 202/463-8405 **or** 800/760-6272; **or Barbara** McMillen, **FHWA,** 202/366-4634

The National Bicycle and Pedestrian Clearinghouse is operated by the Bicycle Federation of America and the Rails-to-Trails Conservancy. The Clearinghouse is the main distribution point for U.S.DOT documents dealing with bicycle, pedestrian, and trail issues. It provides technical assistance and referrals for transportation, recreation, and safety professionals and advocates in the areas of planning, engineering, design, safety, education, enforcement, and research.

National Highway Institute

COURSES

Users:
Federal, state, and local governments and planners

Contact:
Barry Nunemaker, NHI, 703/285-2772

The National Highway Institute (NHI) is the technical training division of the Federal Highway Administration and serves as one of the primary offices for the transfer of new technology, both nationally and internationally. Training courses available through the State Programs Division of NHI address topics relating to new technology, current highway research, applications of new procedures, utilization of new materials, federal policy changes, and environmental guidelines. NHI has developed a series of courses to assist state and local governments, and planners learn more about travel demand forecasting, census applications, arterial capacity and planning, and access management. NHI is developing new courses on intermodal planning and management systems and access to intermodal facilities. Courses may be sponsored by federal, state, and local highway and transportation agencies located within the United States, as well as Local Technical Assistance Program Centers, associations, consulting firms, private industry, universities, and other national and international entities engaged in highway work of interest to the United States (indicated by "Group Registration" in course listing).* To request a copy of the NHI course catalog, call 703/285-2772.

National Transit Institute

COURSES AND TECHNICAL SUPPORT MATERIALS

Users:
Transit employees at the federal, state, and local level

Contact:
Charles Morison, FTA, 202/366-0245, **or**
NTI, 908/932-l 700

ISTEA established the National Transit Institute (NTI) at Rutgers University to support the national training and development needs of the transit industry. FTA modeled the NTI after the National Highway Institute. Courses cover a number of subjects relating to federal regulations, standards, and policy initiatives. In addition, there will be industry-defined training and a clearinghouse and referral service. The purpose of this project is to develop and implement a national program of training for federal, state, and local transportation employees; to conduct a clearinghouse relating to training and development; and to establish a network of referral and technical assistance relating to training and human resources development in transit. Courses are available on an individual registration basis, as well as group registration basis.*

Resource Information System

ON-LINE ELECTRONIC BULLETIN BOARD

Available April 1995

Users:
State, **federal, MPO, and local governments; transit agencies; professional organizations; transit suppliers; academia; researchers**

Contact:
Patricia Cass, FTA, 202/366-0185

The electronic bulletin board (EBB) will be a self-service, computerized database system available to anyone in the transit industry who has access to a personal computer. Access to the bulletin board will be through a modem; alternately, the information stored in the database system can be provided to the user on disk. The EBB will provide the latest available information on ongoing research, technical assistance activities, conferences and workshops, and other FTA-related information of interest to the transit community. The EBB will have the capability to provide and integrate available research information under the National Transit Planning and Research Program component, the Transit Cooperative Research Program, the Local Technical Assistance Program, the National Transit Institute, the University Transportation Centers Program, the University Institutes Program, and the State Planning and Research Program.

* "Individual registration" in course listing indicates that an individual may register for a scheduled course. "Group registration" indicates that the course must be sponsored by an agency or organization, and the sponsoring organization invites attendees.

University Transportation Centers Program

COURSES • TECHNOLOGY TRANSFER • CLEARINGHOUSE

Users:
State, MPO, and local planners

Contact:
Amy Stearns, RSPA, 202/366-4957

The objective of the University Transportation Centers (UTC) program is to advance U.S. technology and expertise in the many disciplines that compose transportation. This is done through education, research, and technology transfer at university-level centers of excellence. The University Transportation Centers have become focal points for solving present and future transportation problems and for training the next generation of leaders in the field. Established in 1988, the UTC Program has engaged research personnel and facilities in more than 450 research projects with the help of $83 million in federal and matching money. To date, the program, which has 63 participating universities (including seven minority institutions), has issued more than 560 reports and involved more than 1,400 university students and faculty in various program activities. Research is coordinated through 10 regional university transportation centers and 3 national transportation centers:

Region l-Massachusetts Institute of Technology
Region 2-City University of New York
Region 3-Pennsylvania State University
Region 4-University of North Carolina
Region S-University of Michigan
Region 6-Texas A&M University System
Region 7-Iowa State University
Region 8-North Dakota State University
Region g-university of California, Berkeley
Region lo-university of Washington

Mack-Blackwell National Rural Transportation Study Center—
University of Arkansas

National Center for Transportation Management, Research and Development—
Morgan State University

National Center for Transportation and Industrial Productivity—
New Jersey Institute of Technology

For information on research and technology transfer projects sponsored through the UTC Program, contact:

University Transportation Centers Clearinghouse
Anne Marie Quinn
The Pennsylvania State University
Research Office Building
University Park, PA 16802-47 10
Telephone 814/863-3614

Volpe National Transportation Systems Center

REPORTS • DATABASES • MODELS • CONFERENCES

Users:
Federal, state, and local governments

Contact:
Lynn C. Murray, RSPA, 617/494-2224 **(fax** 617/494-2224**)**

The John A. Volpe National Transportation Systems Center, located in Cambridge, Massachusetts, is DOT's transportation and logistics research and analysis center. It helps DOT and other organizations identify and resolve transportation problems that require advanced and coordinated systems and technological research and development. Both through in-house staff and in combination with contract research, the center provides studies, analyses, systems development, and research to meet the needs of customers. The center develops integrated systems approaches to cross-cutting (interagency and/or intermodal) transportation issues and is recognized by government, the transportation community, and academia as a focal point for the assimilation, generation, and interchange of knowledge concerning transportation and logistics systems. The center annually conducts approximately 500 sponsored projects in research, development, and operations engineering.

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DOT INTERMODAL RESOURCES

Bureau of Transportation Statistics (BTS)

400 Seventh Street, S.W., Washington, DC 20590

The Bureau of Transportation Statistics has an intermodal transportation focus. Its missions are to compile, analyze, and make accessible information on the nation's transportation systems; to collect information on intermodal transportation and other areas; and to enhance the quality and effectiveness of the Department of Transportation's statistical programs.

Federal Aviation Administration (FAA)

800 Independence Avenue, S.W., Washington, DC 20591

The Federal Aviation Administration is charged with regulating air commerce, controlling the use of navigable airspace, installing and operating air navigation facilities, and developing and operating a common system of air traffic control and navigation. Most trips involving air travel start and end with some other mode of transportation.

Federal Highway Administration (FHWA)

400 Seventh Street, S.W., Washington, DC 20590

The Federal Highway Administration encompasses highway transportation in its broadest scope, seeking to coordinate highways with other modes of transportation to achieve the most effective balance of transportation systems and facilities under cohesive federal transportation policies.

Federal Railroad Administration (FRA)

400 Seventh Street, S.W., Washington, DC 20590

The Federal Railroad Administration promulgates and enforces rail safety regulations and conducts research and development in support of improved railroad safety, including at intermodal freight and passenger terminals.

Federal Transit Administration (FTA)

400 Seventh Street, S.W., Washington, DC 20590

The Federal Transit Administration (formerly the Urban Mass Transportation Administration) assists in developing improved mass transportation facilities, equipment, techniques, and methods; encourages planning and establishing areawide urban mass transportation systems needed for economical and desirable urban development; assists state and local governments in financing such systems; and provides financial assistance to state and local governments to help implement national goals relating to mobility for elderly persons, persons with disabilities, and economically disadvantaged persons. The Clean Air Act Amendments and the ISTEA have brought renewed emphasis to the important role transit plays in an overall transportation system.

Maritime Administration (MARAD)

400 Seventh Street, S.W., Washington, DC 20590

The Maritime Administration is responsible for the safe and efficient operation of the nation's public ports. MARAD has taken the lead in assessing the adequacy of intermodal access to ports.

National Highway Traffic Safety Administration (NHTSA)

400 Seventh Street, S.W., Washington, DC 20590

The National Highway and Traffic Safety Administration carries out programs relating to the safety performance of motor vehicles and related equipment, motor vehicle drivers, and pedestrians.

Office of Intermodalism

400 Seventh Street, S.W., Washington, DC 20590

The Office of Intermodalism was established in the Office of the Secretary of Transportation in response to the Intermodal Surface Transportation Efficiency Act of 1991. The Office provides a single, high-level focal point for coordinating and advocating the DOT's activities involving more than one mode of transportation.

Research and Special Programs Administration (RSPA)

400 Seventh Street, S.W., Washington, DC 20590

The Research and Special Programs Administration is responsible for the areas of hazardous material transportation and pipeline safety, transportation emergency preparedness, safety training, and multimodal transportation research and development activities.

United States Coast Guard (USCG)

2100 Second Street, S.W., Washington, DC 20593-0001

Coast Guard activities include search and rescue, maritime law enforcement, marine inspection, mar-ine licensing, Great Lakes pilotage, marine environmental response, port safety and security, waterways management, aids to navigation, bridge administration, ice operations, deepwater ports, boating safety, Coast Guard Auxiliary, military readiness, reserve training, and the Marine Safety Council.

USER SURVEY FORM-

/n termodal Technical Assistance for Transportation Planners and Policymakers

This publication is intended to be a tool for transportation planners, policymakers, and others involved in improving the performance of our intermodal transportation system.

Please take a minute to let us know what you think of the publication, so that we can improve future editions to better meet your needs.

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If "yes," what are these areas? Do you have recommendations for needed projects?

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Does the report include the right amount of information about the products?

❑ Yes ❑ No

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❑ Yes ❑ No

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